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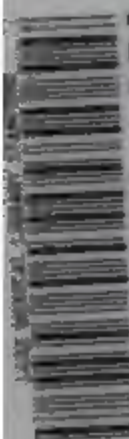
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TERAPEUTIC INDEX  
OF PRESCRIPTION WRITING PRACTICE  
ANDERED M. BARTON

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# THERAPEUTIC INDEX & PRESCRIPTION WRITING PRACTICE

*Compiled in accordance with the ninth revision of the  
United States Pharmacopœia*

BY

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**THIS LITTLE VOLUME IS DEDICATED TO MY STUDENTS AT  
GEORGETOWN MEDICAL SCHOOL AND HOSPITAL, WHO  
ENCOURAGED ME TO BELIEVE THAT THE MATTER  
CONTAINED IN ITS PAGES HAS ASSISTED THEM  
IN ACQUIRING A GREATER INDEPEND-  
ENCE, SKILL AND ORIGINALITY IN  
THE PRACTICAL AND SCIENTIFIC  
APPLICATION OF DRUGS**

**104955**







## INTRODUCTION

In writing this little book the Author has had two main objects in view. First to write a therapeutic index of pharmacotherapy, in which, only those drugs should be studied and applied to the treatment of diseases and symptoms, which satisfactorily conform to the requirements of a rational pharmacology and clinicology. Second, to write a book, for medical students, internes and young practitioners which may enable them to learn correctly and easily the art of writing prescriptions, so that by a moderate diligence they might hope to master this art, early in their career, thereby avoiding the humiliating necessity of copying formulae from books or of using proprietary nostrums in their practice.

In attaining the first object, the requirements for admission of drugs into the book, has been raised, with the natural result, of cutting down their number. Since in reality, the number of useful drugs is small, space has thereby been obtained for the introduction of very brief descriptions of the physiological actions involved. This is useful information, since the application of drugs to given states, often emerges from just such considerations. The first object will then have been gained if the student has been taught to select the proper drug for a given disease, symptom or pathological state and to understand the reasons for his selection.

In attempting to attain the second object, namely, to teach the student how to write prescriptions, the Author has departed as far as possible, from the method employed in Medical Formularies. Of Formularies and Indexes of Drug treatment there are many, but unfortunately, few if any of them are likely to be of benefit to the serious student. First because they are usually mere collections of ready made prescriptions containing unsuitable or

## INTRODUCTION

obsolete ingredients, and useless pharmaceutical detail. Secondly because the prescriptions are written out in bulk and there is no opportunity for that natural association of the drug and its average dose which alone can fix the facts of posology in the student's mind. Most of the Formularies with which I am acquainted are merely indiscriminate collections of drug traditions. No serious attempt seems to be made in any of them to separate wheat from chaff or to throw away the useless ballast of an almost medieval therapy.

A concrete example taken from the book itself will illustrate its plan better than a further general description. We will take for example the caption Anemia. A few lines merely are given to a general statement since the work is not intended to be a System of Therapeutics or a book on Clinical Medicine. The first drug mentioned under Anemia is of course Iron. This is put in *italics* and a brief pharmacological statement given. Then the chief preparations of iron are given in the form of single prescriptions with the proper doses appended and simple instructions as to how they may be prescribed. The student will find here the important preparations and he will associate the preparation with its dose and method of administration. No attempt is made to give every preparation of iron but only the best and most available. After Iron comes Arsenic which is also in special type showing that it is a drug to be naturally associated with the treatment of anemia. After a brief pharmacological statement the principal preparations of Arsenic are given in the form of single preparations with their doses and methods of administration.

Following Iron and Arsenic comes a paragraph showing how these drugs may be combined. The question of combination of drugs is a much debated topic among pharmacologists and clinicians but while there is considerable and well founded opposition to polypharmacy or the combination of numerous drugs in one prescription, there is a general consensus of opinion that by the judicious and scientific combination of drugs the physician may obtain







## INTRODUCTION

results which are not to be had by a rigid adherence to single drug prescribing. The dangers of polypharmacy being appreciated and condemned it is to be hoped that the matter contained in the book relating to combinations of drugs will be of advantage. Therefore under Iron and Arsenic in anemia as elsewhere the author has given the simplest and best methods of effecting conservative combinations.

The major portion of the book is taken up by the first part, which is a Therapeutic Index arranged alphabetically according to diseases and symptoms. This arrangement appears to be the best because the most practical. The student or practitioner can use the book as a pocket manual of reference as well as a systematic treatise on drugs and their uses. Finally an alphabetical list of the drugs themselves has been appended as a second part in which under each drug is given a list of the diseases or symptoms under which it is to be found in the Therapeutic Index. This will enable the student to use the book as a *materia medica*, since, whenever so inclined he may refer to any particular drug such as opium, mercury, etc., and find the principal preparations, their doses and methods of administration.

Finally, the book has been made to conform to the ninth decennial revision of the United States Pharmacopoeia, which became official September 1, 1916. The method of prescribing average doses for all drugs and preparations adopted by the last two revisions of the Pharmacopoeia, is a distinct improvement upon the old method of giving minimum and maximum doses. Only one dose has to be committed to memory and this the average dose. The age of the patient, and the circumstances of the case will call for modifications of this dose, which must be left to the judgment of the prescriber.

It will be unnecessary to further elaborate the plan of the work. A glance at its pages will make it plain. If I have succeeded even partially in obtaining the above ends I shall be satisfied.

**I desire to express my thanks for kind assistance in copying the matter of this book from cards and in proof-reading to Drs. Paul and Arthur Zin Khan of this city.**

**THE AUTHOR.**





## **THERAPEUTIC INDEX**









# THERAPEUTIC INDEX

Therapeutic Index or list of Diseases and Symptoms with their rational pharmacological treatment.

**ABORTION.** Treatment largely surgical. Spontaneous recurrent abortion is often due to syphilis.

Threatened abortion may require depression of the central nervous system by *Opium*, *Bromides* or *Methane Narcotics*, e. g. *Chloral*.

R̄. Morphinae sulphatis, .008 gm. (gr. 1/8) ft. hypodermically.

R̄. Extracti opii .03 gm (gr. 1/4), ft. by suppository or pill

*Opium* and *Chloral* are sometimes combined:

R̄. Morphinae sulphatis .005-008 gm. (gr. 1/12-1/8)  
Chloralis hydratis . . . . . 5 gm. (grs. 8)  
Syrupi aurantii  
Aquæ, aa. q. s.  
Sig. Dose repeated carefully in attempt to prevent abortion.

Or *Opium* and the *Bromides* may be used:

R̄. Tincturae opii . . . . . .5 mil (8 minims)  
Potassii bromidi . . . . . .3 gm. (5 grs.)  
Aquæ menthae (or other flavored water) q. s.  
Sig. Repeated in few hours if indicated.

Or in mild circumstances *Bromide* alone.

R̄. Potassii or . . . . . .3 gm. (5 grs.)  
Sodii Bromidi . . . . . .1. gm. (15 grs.)  
Aquæ cinnamomi (or other flavor) q. s.  
Sig. Every few hours as indicated.

*Note*.—*Viburnum prunifolium*, *cimicifuga*, potassium chlorate and *asafoetida* which have been much used empirically have no action or are so uncertain as not to deserve serious attention.

**ABRASIONS.** Treatment surgical. *Dusting powders* are used to protect, soak up secretions and render infection less liable: talcum, talcum purificatum, calcium phosphate, carbonates, kaolin, starch, lycopodium. To these powders antiseptics may be added as boracic or salicylic acid.

R<sub>x</sub>. Acidi borici  
Talci purificati, aa.  
Sig. Dusting powder.

*Emollients* as protectives, alone or combined with antiseptics are used. Perhaps the chief function served by these is that of protection. Ex. adeps, adeps benzoïnatus, adeps lanae, petrolatum, oleum olivae.

Antiseptics may be used:—Mercuric chloride (1-1000) hydrogen peroxide are frequently used. Tincture of iodine is a popular application.

Small abrasions may properly be covered with collodion or a solution of gutta percha or compound tincture of benzoin, applied with a brush.

**ABSCCESS** (See also Acne). The only effective treatment is surgical. When there is suppuration pharmacological treatment is almost negative. Occasionally some indication exists which can rationally be treated with drugs; for example anemia (q. v.), diabetes (q. v.) etc.

Local treatment—iodine may abort in very early stages by virtue of hyperaemia—carbolic acid 5-10 m. in 2% solution hypodermically may abort—alcohol may abort. Gauze is soaked in alcohol (60-90%) wrung out, applied and covered with cotton and oiled silk, gutta percha or impermephane.

*Quinine* and the *Salicylates* are considerably used, empirically perhaps, to prevent abscess formation. The clinical evidence seems somewhat in their favor.





- R. Quininae sulphatis, bisulphatis or hydrochlorates .1–.3 gm. (1 1/2–5 gr.).

In capsule, flavored acid solution or mixture of liquorice.

Dose of Quinine Alkaloids in U. S. P. ix revision is as follows: average dose. 1 gm. (1 1/2 grs.).

Antimalarial dose at least 1 gm. (15 grs.) daily.

- R. Quininae sulphatis . . . . . gr. iss.  
 Acidi sulphurici aromatici . . . . . m. v.  
 Syrupi aurantii . . . . . ʒi  
 Aquæ distillatae . . . . . q. s. ʒss  
 M. F. Sig. Dose t. i. d.

- R. Quininae sulphatis . . . . . gr. iss.  
 Fluidextracti glycyrrhizae . . . . . 1/3  
 Elixiris aromatici . . . . . q. s. ad 3/3  
 M. F. Sig. Dose, t. i. d.

An acid cannot be added here because it would precipitate the glucoside glycyrrhizin.

- R. Sodii salicylatis 1 gm. (15 grs.), usually given in flavored solution with sodium bicarbonate to reduce urinary acidity, as:—

- R. Sodii salicylatis . . . . . gr. xv  
 Potassi bicarbonatis . . . . . gr. xx  
 Aquæ menthae piperitae . . . . . ʒii  
 M. F. t. i. d. Diluted.

- R. Quininae sulphatis . . . . . grs. iss  
 Sodii salicylatis . . . . . grs. xv  
 M. F. capsules.  
 Sig. p. r. n.

*Note:*—Calcium sulphide is ineffective in recurring boils as in Acne. The same may be said of calcium chloride or lactate. Guaiac is also useless.

Recently the bacterines or vaccines have been much used. Staphylococcus and streptococcus vaccines alone or mixed have been employed. The results have not been certain.

**ABSCCESS CHRONIC** (See also Tuberculosis). Usually tubercular; treatment is surgical. Peroxide of hydrogen, mercuric chloride 1-2500; iodoform oil emulsion (10%); Bismuth vaseline paste (30%,) etc., are used with varying success.

**ACANTHOSIS NIGRICANS.** No pharmacological treatment.

**ACETONEMIA**—Acetonuria—Acidosis. Acetonemia or beta oxybutyric acid intoxication often arises in diabetes (q. v.) Cyclic vomiting of children is often found associated with Acidosis.

The *Alkalies* are used to neutralize the acid products of the disordered metabolism. *Sodium Bicarbonate* is given by mouth or subcutaneously. By hypodermocleisis use 1-2 pints of a 3% solution.

R. Sodii bicarbonatis. . . . . 1 gm. (15 grs.)  
In solution flavored with peppermint p. r. n.

Or *Sodium Bicarbonate* and *Saline* Purgative as:

R. Sodii bicarbonatis. . . . . grs. xv  
Sodii sulphatis. . . . . ℥iv  
Glycerini. . . . . ℥i  
Aquæ anisi. . . . . ℥i  
M. F. q. 2 h. or oftener.

**ACHONDROPLASIA.** No pharmacological treatment.

**ACHYLIA GASTRICA.** *Hydrochloric acid* and *pepsin* are used on rational grounds since they are absent in this disease. It has been a matter of some surprise that they are not more effective than experience has shown them to be. The most plausible reason assigned for this seems to be that the true secretive hormone is not present. The gastric juice of animals (dog and pig) has been used with good results.







- R̄. Acidi hydrochlorici diluti . . . 1 mil (15 minims)  
Well diluted in water or flavored menstruum.

*Hydrochloric Acid and Pepsin* is a frequent combination.

- R̄. Acidi hydrochlorici diluti . . . . . m. xv  
Glyceriti pepsini . . . . . m. xlv  
Aquæ . . . . . ʒiv  
Given diluted, 1/2 hr. after meals.

- R̄. Acidi hydrochlorici diluti . . . . . m. xv  
Pepsini (scale) . . . . . gr. viii  
Syrupi acidi citrici . . . . . 1/10  
Aquæ . . . . . 9/10  
M. F. Sig. ʒi. t. i. d.

**ACIDITY** of Stomach—see Hyperacidity.

**ACNE.** Pharmacological treatment is very uncertain. Careful exposure to X-rays is useful. The local treatment which is very important, is principally surgical and anti-septic.

*Arsenic* is used empirically; it may possibly act aetiotropically, i. e. destroy the cause.

- R̄. Liquoris potassi arsenitis, or

- R̄. Liquoris sodii arsenitis, or

- R̄. Liquoris acidi arsenosi. Dose of each .2 mil.  
(3 minims.)

Prescribe small quantity. Begin with one or two drops, t. i. d., using medicine dropper, and increase one drop daily until twenty or thirty drops are taken. Look out for intolerance; gastro-intestinal irritation, skin eruption and facial edema.

*Arsenic and Mercury* is a rational combination.

- R̄. Liquoris arseni et hydrargyri iodidi (Donovan's sol.) .1 mil. (1 minim).  
Taken diluted, t. i. d., and carefully increased.

Remember that all arsenical solutions are 1% strength, so that one drop or minim contains 1/100 gr. of arsenic.

*Note:*—Calcium sulphide is ineffective. Staphylococcus and acne bacillus vaccines have been much used with results which are much debated at present.

**ACROMEGALY.** Pharmacological treatment is negative. Extracts of *Pituitary* gland and *Thyroid* gland are used empirically. Results sub judice.

R̄. Hypophysis siccae . . . . . .03 gm. (1/2 gr.)  
M. F. capsule, tablet or powder, t. i. d.

R̄. Liquor hypophysis\* . . . . .1 mil. (15 minims)  
Sig. 1 c. c. sterile solution, intramuscularis  
glutei, p. r. n. May be given internally.

R̄. Thyroidei sicci . . . . .1 gm. (1 1/2 grs.)  
Sig. In capsule or tablet beginning with small  
dose and cautiously increasing.

**ACTINOMYCOSIS.** The treatment is principally surgical and roentgenological.

*Potassium Iodide* seems effective—modus operandi unknown. May possibly act aetiotropically upon the ray fungus. Is usually administered as saturated solution.

R̄. Potassii iodidi . . . . .30 gms. (℥i)  
Aquæ destillatae q. s. *ad* . . . .30 mls. (℥i)  
M. F. saturated solution.

Begin with doses of five drops diluted, t. i. d., p. c. and gradually increase to 30 or 40. A medicine dropper should be used to measure doses. Many things are used to mitigate the taste among which may be mentioned essence of pepsin. Beware of intolerance (nasal catarrh, etc.).

\*This solution according to ninth revision U. S. P. is a transparent liquid colorless or nearly so and is physiologically standardized on the isolated uterus of virgin guinea pig.





**Pharmacological treatment is rather ineffective.**

[illegible]

**R<sub>x</sub>. Liquoris epinephrini (adrenalin) hydrochloridi\***  
**1-1000.**

**ADENITIS.** See Bubo, Tonsilitis, Mumps, Goitre, Leucocythemia.

*Astringents* are used locally with palliative benefit but are probably unable to effect a cure in any but mild cases.  
Ex. Tannin.

**R<sub>x</sub>. Glyceriti acidi tannici. . . . . 5%**  
**Aquæ**

**Sig.** Injected along inferior meatus.

**\*Solution of suprarenal gland is not a U. S. P. preparation.**

**ADYNAMIA.** See Debility.

**AFTER PAINS.** Usually occur in multipara; only in primipara after undue distention. Pain is at times severe enough to require treatment. Massage is useful.

*Ergot* is indicated if due to uterine inertia. Action is due to Ergotoxine which stimulates the motor myoneural junctions of the hypogastric nerves in the uterus, thus inducing contraction.

℞. Fluidextracti ergotae . . . . 2 mls. (30 minims)  
Elixir q. s.  
Sig. Give every 2 or 3 hours for several doses.

*Quinine* is used if due to uterine inertia; quinine acts apparently directly on the uterine muscle.

℞. Quininae sulphatis  
Average dose U. S. P. IX. tonic .1 gm. (1 1/2 grs.)  
antimalarial 1 gm. (15 grs.)  
Sig. Put in capsule—one every three hours for a few doses.

The *Analgesics* may be necessary to relieve pain. Analgesics of the antipyretic group: *Acetanilid*, *Antipyrin*, *Phenacetin* and to relieve pain the alkaloid series (*Opium*) are used

Or combinations as follows may be used:

℞. Extracti ergotae . . . . . gr. iv  
Quininae sulphatis . . . . . grs. iss  
Extracti opii . . . . . gr. s. s.  
M. F. Make pill, p. r. n.

In liquid form such a combination might be made thus:

℞. Fluidextracti ergotae . . . . . m. xxx  
Quininae bisulphatis . . . . . gr. iss +  
Tincturae opii . . . . . m. viii







Elixir eriodictyi aromatici . . . . . 3 ii

M. F. Sig. p. r. n. The bisulphate of quinine is used because soluble. Elixir of yerba santa (eriodictyon) disguises taste.

**AGALACTIA.** Many so-called galactagogue mixtures are on the market, but if they have any effects it is probably due to the increased fluid intake. Exercise in the open air is extremely important. Careful massage of the breasts is practised.

Many drugs have been recommended for deferred milk secretion but none are absolutely dependable.

*Alcoholic* beverages are used: spiritus frumenti, spiritus vini gallici, vini (wines); beers and malts. They act by sparing proteids and thus affecting metabolism, also by providing more fluid.

*Pilocarpine* is used alone or associated with *strychnine*, but the effects are extremely doubtful.

*Note*—The secretion of milk is apparently not much increased by pilocarpine. The amount of sugar is increased somewhat through action on the liver. Strychnine does not directly increase the secretion of milk but acts by stimulating the central nervous system.

**ALBUMINURIA.** See also Heart and Bright's Disease.

Albumen may appear in the urine as a result of organic disease of the kidney or under many circumstances where no serious organic change exists. But whether the albuminuria is functional or organic there are no drugs which per se have any effect upon it.

*Note*:—Gallic acid which formerly had a reputation for preventing the passage of albumen through the kidney is entirely irrational and useless. The same may be said of calcium lactate and the glycerophosphates.

**ALCOHOLISM.** See also Debility, Delirium, Insomnia, and special diseases as Gastritis, Delirium Tremens.

Alcohol should be prohibited or reduced. Hot baths, massage and nutritious food may be indicated. In acute alcoholism empty the stomach and introduce 20–30 grs.

of Comp. Jalap Powder in a cup of black coffee; the latter by rectum if not retained. Keep warm. Treat collapse (q. v.) and shock (q. v.).

*Aromatic Spirits of Ammonia* 3 s.s. well diluted or strong coffee q. s. are rather effective for sobering.

*Strychnine* is much used in chronic alcoholism; it acts as a bitter in the alimentary canal and as a stimulant to the central nervous system.

℞. Strychninae nitratis. . . . . .0015 gm. (1/40 gr.)  
In tablet, triturate, or aqueous solution, p. r. n.

℞. Extracti nucis vomicae. . . . . .015 gm. (1/4 gr.)  
Excipient . . . . . q. s.  
Pill, p. r. n.

℞. Tincturae nucis vomicae. . . . . .5 mil. (8 minims)  
In any solution as flavored water or elixir.

*Capsicum* is used as a substitute for spirits in chronic alcoholism; it acts as a carminative upon the gastric mucous membrane.

℞. Tincturae capsici. . . . . .5 mil. (8 minims)  
Very well diluted, p. r. n.

℞. Oleoresinae capsici. . . . . .03 gm. (1/2 gr.)  
Excipientis. . . . . q. s.  
Pill, p. r. n.

Combinations of *Strychnine* and *Capsicum* may be used.

℞. Tincturae nucis vomicae. . . . . m. 8  
Tincturae capsici. . . . . m. 8  
Aquæ or elixir. . . . . q. s.  
Sig. To be taken well diluted, p. r. n.

*Simple Bitters* are useful alone or in combination with *Strychnine* and *Carminatives* (*Cinchona*, *Gentian*, *Nux*, *Capsicum*).





- ℞. Tincturae cinchonae compositae . . . .4 mls. (3i)  
Sig. Diluted, p. r. n.
- ℞. Tincturae gentianae compositae . . . .4 mls. (3i)  
Sig. Diluted, p. r. n.
- ℞. Tincturae nucis vomicae. . . . .5 mil (8 minims)  
Sig. Diluted, p. r. n.

Combinations of the above drugs are useful; for Ex. *Strychnine* and *Capsicum* and *Simple Bitter* as:

- ℞. Strychninae nitratis . . . . .gr. 1/40  
Tincturae gentianae compositae . . . .3i  
Tincturae capsici . . . . .m. 8  
Elixir auranti . . . . .q. s.  
Sig. To be taken diluted before food or p. r. n.
- ℞. Tincturae nucis vomicae. . . . .m. 8  
Fluidextracti kolae N. F. . . . .3i  
Tincturae capsici . . . . .m. 8  
Tincturae cinchonae compositae . . . .3i  
Aquæ menthae piperitae . . . . .q. s.  
Sig. To be taken diluted, p r. n.

The *Bromides* are frequently given to control the nervousness, with *Chloral* if sleep is required; with *Carminatives* if gastric distress is present, or both together.

- ℞. Potassii bromidi . . . . .1 gm. (grs. 15)  
Chlorali hydrati . . . . .5 gm. (grs. 8)  
Tincturae capsici . . . . .5 mil. (8 minims)  
Distilled water or flavored water (peppermint)  
or elixir q. s.  
Sig. To be taken diluted, p. r. n.

*Note:*—The student should remember that chloral is decomposed by alkalies so that aromatic ammonia spirit should not be added to the above. Also with respect to chloral and bromide mixtures which are so often given in

alcoholic cases that the diluent should not be strongly alcoholic with possible separation of an alcoholate for fear of an over dose. Bromides and strychnine however when combined require an alcoholic, (elixir) menstruum; as for example.

*Bromide and Strychnine:*

R̄. Potassi bromidi.....gr. xv  
 Strychninae sulphatis.....gr. 1/40  
 Elixiris aromatici. ....3ii  
 Sig., p. r. n.

Occasionally morphine, atropine and strychnine may be necessary hypodermically. If alcoholism is chronic and severe it may require treatment in an institution. There is no real drug cure for alcoholism. Many different methods are used but none are specific. Every decennium sees its popular cure. At present the Towne treatment appears to enjoy this distinction. (See also morphinism.)

**ALOPECIA.** See also Pityriasis.

Certain varieties particularly the premature form do not respond to treatment. There is some connection between the frequency of baldness in men and their form and manner of wearing head gear.

If syphilitic, the treatment is specific (q. v.). Local irritation is much used. The substances and means of producing it are legion. Massage, dilute *ammonia* water (10%), *turpentine*, *alcohol* may be mentioned, also tincture of *capsicum* 5%, tincture of *cantharides* 5%, *mercuric chloride* 1-2000, spirits of *volatile oils* 10°, *bay rum*, etc. Various combinations of the above are used, none of which have any particular superiority.

There is no internal pharmacological treatment.

In Alopecia Areata *Mercury* is much used; especially *unguentum hydrargyri ammoniatae* and *petrolatum*. *Balsam Peru*, *resorcin*, *salicylic acid* and *sulphur* are also used.

A few formulae may be given.







- ℞. Tincturae cantharidis . . . . . 10%  
 Olei ricini . . . . . 5%  
 Alcohol . . . . . q. s.  
 Apply locally.
- ℞. Resorcini . . . . . 2-4%  
 Tincturae cantharidis . . . . . 1-2%  
 Glycerini . . . . . 4%  
 Aquæ . . . . . 100  
 Alcoholis . . . . . aa. q. s. 100  
 Sig. Use locally once daily.
- ℞. Quininae sulphatis . . . . . 1/2%  
 Zinci sulphatis . . . . . 1/4%  
 Tincturae cantharidis . . . . . 1-2%  
 Alcoholis . . . . . 20%  
 Glycerini . . . . . 20%  
 Spiritus myrciae (bay rum) . . . q. s. 100  
 Sig. Apply once or twice daily.
- ℞. Resorcini . . . . . 2-4%  
 Acidi salicylici . . . . . 1%  
 Acidi tannici . . . . . 2%  
 Spiritus camphorae . . . . . 10%  
 Olei ricini . . . . . 1/2%  
 Olei lavandulae . . . . . a few drops  
 Spiritus myrciae . . . . . q. s. ad. 100  
 Sig. Apply locally, one daily.

For Alopecia Areata.

- ℞. Balsami peruviani  
 Resorcini  
 Acidi salicylici . . . . . aa. 1%  
 Sulphuris precipitati . . . . . 10%  
 Lani  
 Petrolati . . . . . aa. q. s. 100%  
 Apply daily.

*Note:*—Prescriptions for ointments, lotions and local

applications generally are best put up in the metric system and the quantities memorized in percentage strength.

**AMBLYOPIA.** Eyes should be examined for refraction or other eye diseases. Treat any concomitant condition according to indications as Anemia, Auto-intoxication, Debility, Tobaccism, Alcoholism, Rheumatism, Syphilis, etc.

*Strychnine* frequently improves vision by acting directly on the retinal cells.

R. Strychninae sulphatis . . . . . .0015 gm. (1/40 gr.)  
In tablet, hypodermically or by mouth, t. i. d.

The dose should be increased if necessary. When a liquid preparation containing strychnine is desired use Tincture of Nux Vomica.

R. Tincturae nucis vomicae . . . . . .5 mil. (8 minims)  
Elixiris adjuvantis\* . . . . . .3i  
M. F. Sig., t. i. d.

*Physostigmin* (*Eserine*) is used because of its effects upon the ciliary body and iris. It contracts both by stimulating the terminations of the autonomic fibres of the motor oculi.

R. Physostigminae salicylatis . . . .001 gm. (1/60 gr.)  
Aquæ destillatae . . . . . .q. s.  
Use 1/3–1% solution. Drop two to four drops in the eye at a time.

*Note:*—The pupil begins to contract in 5–15 minutes after instillation of eserine, attaining its smallest size in half an hour, remains contracted 12–14 hours—the ciliary muscle also contracts, accommodating for near distance; this phase passes off in 2–4 hours. Intraocular pressure is reduced. The action is due to stimulation of the

\*Contains licorice which disguises bitter tastes.





peripheral terminations of the autonomic fibres of the motor oculi nerve.

Santonin affects the vision but not in any way that can be utilized therapeutically.

**AMEBIC DYSENTERY.** See Dysentery Amebic.

**AMENORRHEA.** Is often due to anemia (q. v.). The possibility of pregnancy should be borne in mind, also tuberculosis and displacement.

*Aloes* is frequently used in this condition. *Aloes* acts specifically on the uterus and also produces some pelvic congestion; of course it has also a purgative action.

R̄. Pilulae aloes (U. S. P.)  
Sig. One pill, t. i. d. or p. r. n.

*Aloe* is often given combined with iron.

R̄. Pilulae aloes et ferri (N. F.)\*  
Sig. One pill, t. i. d. or p. r. n.

The student may write an improvised *aloe* pill as follows, using soap or some extract as excipient.

R̄. Aloes.....gr. ii  
Saponis.....gr. ii  
M. F. One pill. Make required quantity.  
Sig. Take p. r. n.

R̄. Aloes purificatae.....gr. ii  
Extracti glycyrrhizae.....gr. ii  
Saponis pulveris.....gr. i  
M. F. One pill. Sig., p. r. n.

R̄. Aloes purificatae.....gr. ii  
Ferri sulphatis exsiccati.....gr. i  
Confectionis rosae.....q. s.  
Pulveris aromatici.....q. s.  
M. F. One pill. Sig., p. r. n.

\*National Formulary 1916.

*Note*:—Various drugs such as potassium permanganate, manganese dioxide, myrrh, pulsatilla, etc., have been used empirically in amenorrhoea but they are without effect.

**ANEMIA.** Anemias are primary and secondary; the commonest form of primary anemia is chlorosis. In secondary anemias treat the cause (q. v.); hemorrhage, cachexia (cancer) syphilis, malaria tuberculosis, metallic poisoning.

*Iron* is the drug which both experimental pharmacology and clinical medicine have shown to be effective. If food iron is defective, then both organic (masked) and inorganic iron preparations are equally effective; if food iron is normal, the inorganic preparations are more effective. Iron acts in anemia by supplying the defective iron in haemoglobin.

R̄. Pilulae ferri carbonatis (Blaud's Pill)\*  
Two pills, t. i. d. or p. r. n.

If constipation exists give:

R̄. Pilulae aloes et ferri (N. F.)  
Two pills, t. i. d. or p. r. n.

The saccharated carbonate lends itself well to powder form in which it may easily be given to children—for example.

R̄. Ferri carbonatis saccharati† . . gr. i or ii  
Olei menthae piperitae . . . . . gms. i or ii  
Pulveris cacao . . . . . gr. iii or more  
M. F. Charta I.  
Sig. One t. i. d.

There are apparently many more official and unofficial preparations of iron than are needed and consequently

\*Each pill contains .06 Gm. of Fe CO<sub>3</sub>, U. S. P. IX.

†15% Fe CO<sub>3</sub>, U. S. P. IX. Average adult dose .25 Gm. (4 grs.).







many of them are rarely used. There are two official insoluble iron preparations used in pill form, *i. e.* reduced iron (ferrum reductum) and the dried sulphate. Both may be prescribed as a pill in the following or other forms:

R̄. Ferri sulphatis exsiccati or ferri reducti . . gr. i  
 Pulveris glycyrrhizae . . . . . gr. i  
 Extracti gentianae . . . . . q. s.  
 M. F. One pill. Make xxx such.  
 Sig. One pill, t. i. d.

Iron and ammonium citrate is a soluble preparation and non astringent. Syrup of lemon makes a good vehicle. It contains under the pharmacopoeal requirements a little over 15% of iron. It may be readily given in the following or other forms:

R̄. Ferri et ammonii citratis . . . . . .25 gm. (4 grs.)  
 Syrupi limonis  
 Aquæ destillatæ . . . . . aa. q. s.  
 Write for ℥iii mixture.  
 Sig. ℥i t. i. d. in water.

Of organic or masked iron preparations, there is a great abundance. No one of them has a marked superiority over the others. Almost every large manufacturer of drugs markets a special organic preparation of iron. The preparation of peptonate of the National Formulary is excellent and unexcelled. It should be given when a masked preparation is desired. ℥i contains 2/5 gr. of iron:

R̄. Liquoris ferri peptonati N. F. . . . . q. s.  
 Average dose 8 mls. (℥ii). Taken in a little water t. i. d.

Elixir of iron, quinine and strychnine, N. F., so-called "I., Q. and S." contains about 1 grain of iron to the dram and is often prescribed as a bitter tonic and hematinic. The student will know how to write for this. It is a National Formulary preparation; the student may how-

ever write readily his own combination of "I., Q. and S." and make the dose to suit himself. Some acid will have to be added to dissolve the quinine as:

- R̄. Ferri phosphatis . . . . . gr. iv  
 Quininae sulphatis . . . . . gr. 1 1/2  
 Strychninae sulphatis . . . . . gr. 1/40  
 Acidi phosphorici diluti . . . . . m. iii-v  
 Syrupi zingiberis . . . . . 1/3  
 Aquæ destillatae . . . . . 2/3  
 M. F. Write for three or four ounce quantity.  
 Sig. 3i., t. i. d., diluted.

*Arsenic* is a drug very frequently prescribed in anemia. Its action is obscure; it seems to act on the blood but particularly on the blood making organs—(bone marrow).

- R̄. Arseni trioxidi . . . . . .002 gm. (1/30 gr.)  
 In pill or solution after meals.

- R̄. Liquoris acidi arsenosi . . . . . .2 mil. (3 minims)

or

- R̄. Liquoris potassii arsenitis (both 1%)  
 .2 mil. (3 minims)  
 3 drops three times daily after meals gradually increased if necessary to 15–20 drops or more  
 Look out for intolerance (puffy eyelids, diarrhoea, abdominal pain).

- R̄. Sodii cacodylatis\* . . . . . .06 gm. (1 gr.)  
 In pill or by hypodermic injection.

*Iron* and *Arsenic* are frequently combined in Anemia. It is of course possible to make a variety of combinations but nothing would be gained by their citation.

- R̄. Ferri reducti or ferri sulphatis  
 exsiccati . . . . . gr. i  
 Arseni trioxidi . . . . . gr. 1/30  
 Excipient . . . . . q. s.  
 M. F. Pill.  
 Sig. Take one t. i. d., p. c.

\*Sodium dimethyl arsenate, U. S. P. IX.





For a liquid combination of iron and arsenic different methods may be employed.

1. Combine Fowler's solution with elixir I., Q. & S.

R̄. Liquoris potassii arsenitis . . . . . m. iii  
 Elixiris ferri, quininae and strychninae  
 phosphatis . . . . . 3i  
 M. F. Take diluted, p. r. n.

2. Combine a soluble iron preparation as iron phosphate or iron and ammonium citrate, with Fowler's solution or solutions of sodium arsenate, as

R̄. Ferri phosphatis solubilis . . . . . gr. iv  
 Liquor sodii arsenatis . . . . . m. iii  
 Syrupi zingiberis  
 Aquæ destillatae . . . . . aa.  
 M. F. 3i, t. i. d., diluted.

*Note:*—Empirical treatments for anemia which are sometimes used but which are of uncertain value are thymus gland, supra-renal gland and bone marrow.

The following substances much used in anemia are irrational, glycerophosphates and hypophosphites of the alkali metals. Hypophosphite of iron acts by virtue of the iron ion. For discussion of the action of hypophosphites and phosphates, see note under Neurasthenia.

There are several fetichisms concerning iron which tradition has handed down, all of which have lost much of their former prestige as a result of more exact pharmacological knowledge. One of these is that iron is a specific for erysipelas; another is that Basham's mixture (Liq. ferri et ammonii acetatis) will cure albuminurias of various kinds including Bright's Disease. A third is that iron is an antidote to arsenic. These beliefs are not taken at their former value at the present time.

**ANEURISM.** See also Syphilis, Arteriosclerosis.

The treatment is occasionally surgical. Rest with restricted diet and fluids are commonly used.

*Potassium Iodide* which is so extensively used for lowering pressure is unable to do this directly. The iodides have no effect on the circulation. It is held that iodides diminish the viscosity of the blood, but it has never been demonstrated. The iodides may be serviceable in aneurism and are worth trying because this disease is practically always due to syphilis.

Potassium iodide is practically always given in saturated solution as follows:

- R̄. Potassii iodidi . . . . . 30 gms. (℥i)  
 Aquæ destillatæ . . . . . q. s. *ad* 30 mls. (℥i)  
 M. F. Saturated solution.  
 Sig. A few drops (each contains gr. 1) gradually increased up to required point 15–30 or more. The taste may be mitigated by taking the dose in essence of pepsin or dropped in milk. Average dose of KI in U. S. P. IX is .3 gm. (5 grs.).

*Note*:—Calcium lactate internally and gelatine solution by injection to increase coagulability of the blood are both ineffective. For a brief discussion of these points, see Hemorrhage Internal.

### **ANGINA LUDWIGS** (submaxillary cellulitis).

The treatment is mainly surgical (incision and drainage).

Pharmacological treatment empirical and consists of administration of *Quinine* and *Salicylates*. Clinical evidence seems favorable.

- R̄. Quininae sulphatis, bisulphatis hydrochloridi, et al.  
 Ft. in capsules, solution or mixture of licorice. The dose of quinine and its alkaloids is thus given in U. S. P. IX. Average dose: .1 gm. (1 1/2 grs.); antimalarial at least 1 gm. (gr. 15) daily.







- R̄. Quininae sulphatis . . . . . gr. 1 1/2 +  
 Acidi sulphurici aromatici . . . . . m. v  
 Syrupi aurantii . . . . . ℥i  
 Aquæ destillatae . . . . . q. s. ad ℥ss.  
 M. F. Sig., t. i. d.
- R̄. Quininae sulphatis . . . . . gr. 1 1/2 +  
 Fluidextracti glycyrrhizae . . . . . 1/3  
 Elixiris aromatici . . . . . 2/3  
 M. F. Sig. ℥i, t. i. d. An acid cannot be  
 added to dissolve quinine because it will  
 precipitate the glycyrrhizin.
- R̄. Sodii salicylatis . . . . . gr. v  
 Potassii bicarbonatis . . . . . gr. x  
 Aquæ menthae piperitae . . . . . ℥i  
 Sig., t. i. d. diluted.
- R̄. Sodii salicylatis. Average dose U. S. P. 1 gm.  
 (15 gr.)\* Usually given in flavored solution  
 with sodium bicarbonate to reduce urinary  
 acidity.

*Quinine and Salicylate* may be readily given as follows:

- R̄. Quininae sulphatis  
 Sodii salicylatis . . . . . aa. gr. ii  
 M. F. capsule.  
 Sig., One or two, three or four times daily.

**ANGINA PECTORIS.** See also Arteriosclerosis, Heart Disease, Nephritis.

Absolute rest is essential and without it drugs are unavailing.

The *Nitrites* are useful in this condition; they lower arterial tension by depressing the unstriated muscle of the vessels, thus leading to their dilatation—the coronary vessels are similarly effected.

\*This is the average dose in acute rheumatism. Under other circumstances sodium salicylate is often given in smaller amounts p. r. n.

- ℞. Amylis nitritis (pearls)  
Break in handkerchief and inhale.  
Average dose .2 mil. (3 minims).
- ℞. Spiritus glycerylis nitratis .05 mil. (1 minim)  
Give hypodermically or by mouth properly diluted.

or

- ℞. Tabletæ nitroglycerini\*...aa. gr. 1/100–1/50  
Give hypodermically—afterwards 1/100 gr. by mouth p. r. n. The chief objection is the production of headache; relieve with anti-pyrine gr. xv in water, or with bromides. The above tablets often deteriorate when exposed.

*Morphine* is the drug most frequently associated with the nitrites for relief of pain.

- ℞. Morphinae sulphatis or hydrochloridi .008 gm. (gr. 1/8). Given hypodermically alone or with atropine .0005 gm. (gr. 1/120).

Between attacks *sodium nitrite* is used occasionally.

- ℞. Sodii nitritis .06 gm. (1 gr.) p. r. n.  
In tablet or solution. In distilled water or any flavored water as mint, anise, or cinnamon.

The chief indication between attacks is to prevent the coronary vasoconstriction. Many drugs are recommended; the ideal drug has perhaps not been found, in fact drugs in the interim are to be given with caution.

*Theobromine* is rational; it is only slightly soluble in water, sodium salicylate aids in dissolving it.

- ℞. Theobrominae..... .5 (8 gr.)  
Sodii salicylatis, q. s. for solution  
Aquæ  
Sig., t. i. d.

\*Unofficial.





This combination is official under the name of: Theobrominae Sodio-Salicylas.

R̄. Theobrominae Sodio-Salicylatis, 1 gm. (grs. 15)  
Ft. in powder or solution.

*Potassium Iodide, Aconite, Pilocarpine* and *Digitalis* in small doses are occasionally used as interim drugs for their depressing effect on the circulation if the blood pressure is very high. They should be used, particularly the last, with extreme caution and carefully watched. Sometimes small doses of *Digitalis* are used for tonic effect (see under Arteriosclerosis, Heart and Bright's Disease).

*Chloral Hydrate* will often relieve the nagging pain of recurring angina and is effective in small doses.

R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
Aquæ menthae piperitæ  
M. F. Sig. Two or three times daily as indicated.

Various combinations of the above interim drugs may be used. The following is an example.

R̄. Sodii nitritis . . . . .gr. i  
Potassii iodidi . . . . .gr. v.  
Policarpini hydrochloridi\* . . . . .gr. 1/30  
Elixiris simplicis . . . . .q. s.  
M. F. Sig. p. r. n.

**ANKYLOSTOMIASIS.** See Uncinariasis.

**ANOREXIA.** In many pathological conditions anorexia may be a prominent symptom, as for example Chlorosis, Tuberculosis, Gastritis, etc. (q. v.).

The *Simple Bitters* are extensively used. They act by

\*Average dose by mouth U. S. P. IX .01 gm. (gr.  $\frac{1}{8}$ ). When repeated dose should be smaller.

virtue of their bitter taste, reflexly increasing gastric secretion, also possibly but to lesser degree, by sensitizing the gastric mucosa.

The simple bitters\* most frequently employed are: *Gentian*, *Columba*, and *Quassia*. *Hydrastis* is also used. Various combinations of the simple bitters are used but no advantage is gained thereby.

- R̄. Tincturae gentianae compositae . . . 4 mils. (3i)  
Taken diluted before meals.
- R̄. Tincturae columbae . . . . . 4 mils (3i)  
Taken diluted before meals.
- R̄. Tincturae quassiae . . . . . 2 mils (30 minims)  
Taken diluted before meals.

The most common association of bitters is *Simple Bitter* and *Nux Vomicae* (strychnine) and *Cinchona*. Here the simple bitters action is reinforced by other bitter substances which possess action after absorption (alkaloids quinine, strychnine).

- R̄. Tincturae gentianae compositae . . . . . 3i  
Tincturae cinchonae . . . . . 3i  
Tincturae nucis vomicae . . . . . m. viii  
Elixiris aurantii . . . . . q. s.  
M. F. Sig. Take diluted before meals.

*Bitters* and *Iron* is a combination often used if there is anemia and anorexia. Here the bitter selected must be free from tannin.

- R̄. Fluidextracti columbae . . . . . m. xxx  
Tincturae ferri citrochloridi† N. F. . . m viii  
Elixiris aromatici . . . . . q. s.  
M. F. Sig. 3i in water before meals.

\**Chirata* has been deleted from both U. S. P. and N. F.

†Tasteless tincture of iron.







*Alcohol* benefits some cases; given as spirits, wine or beer. The action depends on stimulation of the gastric mucosa with consequent increased secretion and absorption. This drug must be prescribed cautiously on account of the danger of habit formation.

*Arsenic* in small doses is often of service in increasing the appetite and improving the general condition in diseases accompanied with cachexia, loss of appetite, general weakness and apathy. It has a specific effect upon the gastric and intestinal epithelium.

R̄. Arseni trioxidi. . . . . .002 gm. (1/30 gr.)  
Sig. In pill or watery solution after meals.

R̄. Liquoris acidi arsenosi 1% sol. q. s.  
Sig. Average dose .2 mil. (3 minims) diluted, after meals. Dose may be gradually increased.

R̄. Liquoris potassii arsenitis 1% sol. q. s.  
Sig. Average dose .2 mil. (3 minims) diluted, after meals.

*Simple Bitters, Nux Vomica* and *Arsenic* are sometimes combined, as for example:

R̄. Tincturae gentianae compositae. . . . .3i  
Tincturae nucis vomicae. . . . .m. viii  
Liquoris potassii arsenitis. . . . .m. iii  
Elixiris simplicis. . . . .q. s.  
M. F. Sig. 3i in water, before meals.

R̄. Strychninae sulphatis. . . . .gr. 1/40  
Tincturae cinchonae. . . . .3i  
Elixiris simplicis. . . . .q. s.  
M. F. S. To be taken diluted, before meals.

**ANTHRAX.** Pharmacological treatment unsatisfactory. Large doses of *Quinine* are recommended. The disease is usually fatal.

**ANURIA.** See also Nephritis, Heart Failure. Obstructive Anurias will need surgical intervention.

In anuria due to disturbances of the circulation, *Digitalis* is the diuretic par excellence; the diuresis is secondary to the effect upon the circulation.

R<sub>x</sub>. Infusi digitalis  
Sig. Average dose 4 mils. (3i).

R<sub>x</sub>. Tincturae digitalis  
Sig. Average dose .5 mil. (8 minims).

Under Nephritis (q. v.) the administration of diuretics will be considered. Under Heart Failure (q. v.) digitalis will be fully considered.

**APHTHAE.** See Stomatitis.

**APOPLEXY.** See Hemorrhage Cerebral.

**APPENDICITIS.** Absolute rest; ice locally, no food. The best treatment is surgical. There is grave doubt as to whether appendicitis has any medical treatment. Eschew drugs, opiates particularly. Move the lower bowel with soap and water enema. Careful purging with salines under strict surveillance is often practical.

**ARTERIOSCLEROSIS.** See also Nephritis, Hypertension. There is no effective pharmacological treatment for the arterial degeneration. It is popular at the present time to eliminate purines and reduce proteids in the diet.

If syphilis can be made out, K.I., Hg and perhaps Salvarsan will be useful. (See Syphilis).

In the late stages various visceral complications may occur and require treatment which can only be palliative. In the early stages a quiet life free from excesses of all sorts will be indicated. Bowels and skin should be kept active. Alcohol is generally contraindicated in any but minimal amounts.





**ARTHRITIS.** See Gout, Rheumatism, Arthritis Deformans.

**ARTHRITIS DEFORMANS.** There is no effective pharmacological treatment. Arsenic, iron and K.I. are used empirically; results uncertain.

Hydrotheraphy and kinesitherapy are much employed with some relief of symptoms. The present tendency is to regard most all the arthritides as manifestations of infection secondary to primary subinfection in various localities. The focus which is much emphasized at present is the mouth and throat and attention should be paid thereto as well as to any other possible points of infection, as middle ear, genito urinary tract, alimentary canal, etc. Riggs disease is credited with producing many cases. See periodontitis.

**ASCITES.** See Cirrhosis Hepatic.

**ASPHYXIA.** Treatment, artificial respiration, transfusion, etc.

Treatment by drugs unavailing until respiration and circulation are re-established.

*Caffein* is the best and safest respiratory stimulant. It can be given conveniently in the form of hot coffee by rectum.

For hypodermic use it can be rendered soluble by adding a salicylate or benzoate.

R̄. Caffeinae sodio-benzoatis  
Equal pts. caffeine and sodium benzoate.

By hypo or internally in capsule or effervescent powder. Average dose, by mouth, .3 gm. (5 grs.); by hypodermic, .2 gm. (3 grs.).

**ASTHMA.** Exciting causes if they can be found are to be avoided if possible. Places, foods and occupations figure here—remember that Asthma is often but a reflex symptom of pulmonary, cardiac, renal, gastrointestinal or nasal disease, requiring treatment.

## The Paroxysm or Attack:—

*Morphine* and *Atropine*. These two drugs combined are the most successful; the former acts by depressing the cerebrum, the latter by paralyzing the peripheral vagus terminations in the bronchi.

- R̄. Morphinae sulphatis or hydrochloridi .008 gm.  
(1/8 gr.).  
Atropinae sulphatis . . . . . .0005 gm. (1/120 gr.)  
Inject hypodermically. Repeat if necessary  
according to circumstances. These drugs are  
usually given in tablet form whether internally  
or by hypodermic injection.

Several fumes or vapors are of assistance in the attack; notably *Potassium Nitrate* paper; *Stramonium*; *Lobelia* and *Belladonna* leaves, etc., in various combinations, as powders, cigarettes, or smoked in a pipe. The nitrate paper gives off pyridine and nitrites in burning which relax bronchial spasm. The leaves when burned give off small quantities of the alkaloids (atropine, lobelline) to which their action is partly due.

A great many asthmatic cigarettes are on the market; ordinary tobacco smoke is often as effective as the above.

- R̄. Potassii nitratis . . . . . ℥ ss  
Pulveris anisi . . . . . ℥ ss  
Pulveris stramonii . . . . . ℥ i  
M. F. powder.  
Sig. Ignite a thimbleful on plate and inhale.

- R̄. Pulveris stramonii fol. . . . . ℥ i  
Pulveris belladonnae fol. . . . . ℥ i  
Pulveris hyoscyami fol. . . . . ℥ i  
Pulveris potassii nitratis . . . . . ℥ i  
M. F. pulvis.  
Sig. Burn half a teaspoonful in a small shovel  
or heavy plate and inhale fumes.







R<sub>x</sub>. Amylis nitritis, average dose .2 mil. (3 minims)  
2-5 drops are poured on handkerchief and in-  
haled. A convenient method of administra-  
tion is the "pearl," a glass disc containing  
.2 mil. (3 minims). This can easily be broken  
in a handkerchief.

**R<sub>x</sub>. Chloroformi q. s.**  
**Sig. Carefully inhale on cloth or inhaler.**

Where the condition is due to tenacious mucous, the *Iodides* are effective. The iodides are excreted along the mucous membranes of the respiratory passages. There appears to be a very general consensus of opinion that iodides are effective in asthma.

**or**

*Arsenic* is sometimes effective as an interim drug in asthma. Its modus operandi is unknown.

**R.** Liquoris acidi arsenosi. . . .2 mil. (3 minims)  
**Sig.** M. 3-5, t. i. d., p. c. (post cibum, after meals).

*Belladonna* (*Atropine*) is sometimes successful. The action of atropine in asthma seems due to its effects upon the vagus terminations.

R̄. Atropinae sulphatis . . . . . .0005 gm. (1/120 gr.)  
In pill or solution.

R̄. Extracti belladonnae foliorum .015 gm. (1/4 gr.)  
In pill.

R̄. Tincturae belladonnae foliorum .75 mil. (12  
minims)  
In watery menstruum.

R̄. Fluidextracti belladonnae radicis .05 gm. (1  
minim).  
In watery menstruum.

Combinations of the above drugs are often used, as for example *Iodide* and *Arsenic* and *Belladonna*.

R̄. Potassii iodidi . . . . . .gr. v  
Liquoris potassii arsenitis . . . . .m. iii (v. s.)  
Aquæ menthae or elixiris adjuvantis (liquorice)  
Diluted, t. i. d. after meals.

R̄. Potassii iodidi . . . . . .gr. v  
Fluidextracti belladonnae radicis . . . .m. i  
Syrupi sarsaparillae comp. . . . .q. s.  
T. i. d., diluted after meals.

A great many drugs have been used empirically and traditionally in the treatment of Asthma, which more exact observation and experiment have tended to relegate to oblivion. Among these may be mentioned *Euphorbia*, *Grindelia*, *Sanguinaria* and *Lobelia*.

**ATHETOSIS.** No satisfactory drug treatment.

*Hyoscine* may diminish the movements. (See Tremor.)





**ATROPHY OF LIVER** (Acute Yellow).

No effective pharmacological treatment. Symptoms such as vomiting (q. v.) may demand treatment.

**AURICULAR FIBRILLATION.** See also Heart Failure.

In this common disease of the heart the impulse formation instead of originating in the pace maker or sino-auricular node arises at multiple foci in the auricular muscle and the heart is rapid and exceedingly irregular. There may or may not be heart failure. Drugs are really only necessary when some degree of heart failure has occurred.

*Digitalis* is the great remedy. Auricular fibrillation is the condition to which drugs of the digitalis group owe their well founded reputation.

R̄. Tincturae digitalis . . . . . .5 mil. (8 minims).  
Diluted, p. r. n.

R̄. Infusi digitalis . . . . . .4 mls. (3i)  
Freshly prepared per secundem artem. Taken  
diluted, p. r. n.

To adults 10–15 m. of tincture or 3i–3iss of infusion are given three or four times daily. If reaction does not begin in four or five days increase the dose to tolerance, as shown by nausea, diarrhoea, headache or pulse retardation, then reduce to lowest dose required to keep pulse slow. Often 5 m. is enough. Usually the reaction happens after 3vi–3viii of the tincture have been given. If pulse rate falls to 60–80 stop completely unless acceleration occurs. Appearance of coupled beats is a danger sign. After getting out of bed small doses 5m.+ may be continued occasionally as required.

Other drugs of the series as *Strophanthus* or *Squill* may be tried if the patient is absolutely intolerant to digitalis. These drugs are not equal to digitalis in efficiency.

R̄. Tincturae strophanthi. . . . .5 mil. (8 minims)  
T. i. d.

R̄. Tincturae scillae . . . . . 1 mil. (15 m.)  
T. i. d.

A large number of proprietary compounds of digitalis are on the market, the best known of which are Digalen, Digipuratum, Digital and various Digitalins. None of these are in any way superior to the Galenical preparations properly made and physiologically standardized. The U. S. P. IX describes methods.

**BALANITIS.** May be gonorrhoeal, chancroidal, diabetic or herpetic.

Treatment is antiseptic, astringent and protective. Also according to causation (q. v.).

**BANTI'S DISEASE.** Splenectomy and X-ray radiation are useful. There is no effective pharmacological treatment though drugs used in Anemia (q. v.) are useful.

**BARBERS ITCH** (Tricophytosis). Various agents are used to kill the fungus. Chief of these are salicylic acid 2%, Tannic acid 5%, Betanaphthol (2 to 10% ointment), Chrysarobin (2-10% ointment), Ammoniated Mercury (5% ung.), Resorcin (5-30% solution or ung.) and sulphur (5% ung.)

Any one or several of these substances may be prescribed in the form of an ointment using benzoinated lard or petrolatum or both together as a base.

**BED SORES.** Treatment surgical. Prophylaxis is important. Relieve pressure by constant change of position or by plaster or water bed.

Wash with dilute alcohol, whiskey or brandy and dust with starch, zinc oxide or boracic acid alone or combined aa.

If slough forms remove same with antiseptic poultice, cover with boracic acid. Stimulate cicatrization with Balsam Peru or Silver Nitrate 1-5%, Glycerite of Borax, or Glycerite of Tannic acid.







**BERI BERI.** Abstention from polished rice. Rest and stimulants are used.

There is no special drug treatment. Heart failure (q. v.) and Dropsy (q. v.) may require treatment on general principles.

Also associated pathological conditions, particularly malaria (q. v.) and Uncinariasis (q. v.)

**BILIOUSNESS.** See also constipation.

The name of a syndrome, malaise with lack of appetite, headache, constipation or diarrhoea; usually the result of gastro-intestinal disorder. May be a symptom of ocular disturbance (Astigmatism); of autointoxication.

There is no specific pharmacological treatment. *Purgatives* are much used, vegetable, saline, mercurial and miscellaneous, as phenolphthalein. A few examples only will be given here.

R̄. *Pilulae catharticae vegetabilis* N. F.

These contain colocythin, jalap, leptandra, podophyllum, hyoscyamus. Average dose 1 pill.

R̄. *Liquoris magnesia sulphatis effervescentis* N. F.

Sig. Average single dose 350 mils. *i. e.* contents of bottle.

R̄. *Liquoris sodii phosphatis compositi* N. F.

Sig. Average dose 8 mils. (3i).

R̄. *Hydrargyri chloridi mitis* . . . . . gr. iiss

*Extracti colocynthidis* . . . . . gr. 1/4

M. F. pill. One pill at bedtime.

R̄. *Hydrargyri chloridi mitis* . . . . . grs. iiss

*Sodii bicarbonatis* . . . . . q. s.

*Pulveris sacchari albae* . . . . . q. s.

Make powder. Take according to circumstances. Small doses can of course be frequently repeated. Calomel is often followed by a Seidlitz powder; there is, however, no

special reason for this. The average laxative dose of calomel U. S. P. IX is given as .15 gm. (grs.  $2 \frac{1}{2}$ ); alterative dose .015 gm. ( $\frac{1}{4}$  gr.)

R̄. Phenolphthalein . . . . . .15 gm. ( $2 \frac{1}{2}$  grs.)  
In powder, cachet, capsule or pill. Larger doses may be necessary.

*Note*:—Calomel has long been used as a chologogue but investigation has shown the secretion of bile by the liver to be unaffected both in man and animals. The stools are often green after calomel but this is due to the fact that the bile present in the intestine is hurried through the bowel and prevented from being converted into brown fecal pigment by the antiseptic power of the mercury which prevents the growth of micro-organisms upon which the conversion normally depends.

The *Bile Salts* enjoy the unique distinction of being the only truly effective hepatic stimulant. Purified ox gall (*Fel bovis purificatum*) contains these salts. It may be readily prescribed in the form of a pill or capsule alone or combined with a laxative.

R̄. Extracti fellis bovis . . . . . .1 gm. (grs.  $1 \frac{1}{2}$ )  
F. Capsule or pill.

Podophyllin, rhubarb powder, phenolphthalein cascara or other laxatives may be added. Examples of such combinations are:

R̄. Aloini . . . . . .gr.  $\frac{1}{4}$   
Extracti fellis bovis . . . . . .grs.  $1 \frac{1}{2}$   
Resinae podophylli . . . . . .gr.  $\frac{1}{6}$   
Pulveris ipecacuanhae . . . . . .gr.  $\frac{1}{8}$   
M. F. pill.

The ordinary single doses of the various cathartics are often diminished when several are combined in one prescription, especially if the same is to be repeated.





- R. Extracti. . . . . grs. iv  
Extracti fellis bovis . . . . . grs. 1 1/2  
M. F. pill. The cascara should be of course  
reduced if it is intended to repeat the dose  
frequently.
- R. Phenolphthaleini. . . . . grs. iss  
Extracti fellis bovis . . . . . grs. iss  
M. F. capsule or pill.

Many proprietary compounds are on the market containing ox gall or bile acids alone or combined with laxatives. They are not superior to the above in any way.

**BITES AND STINGS.** Insect bites (fleas, ants, ticks and bed bugs). Antiseptics, local anesthetics and rubefacients are used, as *Phenol*, *Menthol*, *Camphor* and *Ammonia*.

- R. Phenolis (acidi carbolic), 1-3%  
Apply locally.
- R. Glyceriti phenolis (20%) diluted to 5%  
Apply locally.
- R. Unguenti phenolis 3%  
Apply locally.
- R. Mentholis 5-10%, alcoholic solution  
Apply locally.
- R. Camphorae 5-10%, alcoholic solution  
Apply locally.
- R. Spiritus or linimenti camphorae (camphorated oil)  
Apply locally.
- R. Aquae ammoniae (10%)  
Dilute slightly and apply locally.

R̄. *Linimenti ammoniae* (25%)  
Apply locally.

*Mosquitoes.* All the above substances are used alone or in various combinations, however, the latter are not superior to the single preparations.

*Volatile Oils* of different kinds are also extensively used as prophylaxis as well as treatment (oil of citronella). Various oils such as cloves, cinnamon, erigeron, eucalyptus or pennyroyal are mixed with spermaceti ointment 3i-℥i and rubbed in the skin to ward off mosquitoes and fleas.

*Snake.* Treatment is surgical. Alcohol internally to be deprecated. Ligature, suck wound. Potassium permanganate locally is used.

*Dog or other canines.* Treatment surgical. Free cauterization. Pasteur treatment under certain circumstances.

**BLEPHARITIS.** See also conjunctivitis.

May be caused by errors of refraction. Warm solution of salt, borax or sodium bicarbonate will remove crusts.

Astringent antiseptics are used as *Silver Nitrate* 1/4-1/2%, *Copper Sulphate* 1%.

R̄. *Argenti nitratis* 1/4-1/2%  
*Aquae destillatae*  
Drop in eye.

R̄. *Cupri sulphatis* 1%  
*Aquae destillatae*  
Drop in eye.

*Mercurial Ointments* are used, particularly yellow oxide.

R̄. *Hydrargyri oxidi flavi* 1%  
*Petrolati* q. s.  
Apply locally to lids.

R̄. *Hydrargyri oxidi flavi* 1%  
*Atropini* 1/2%  
White vaseline q. s.







**BOILS.** See also Acne.

May be a diabetic symptom. May be the beginning of carbuncle especially if on the neck. Tonic treatment may be indicated (see Debility with cross references).

Treatment is surgical. Counter irritation in the early stages may abort. For this purpose iodine and alcohol are chiefly used. There is no rational internal treatment. Calcium sulphide is ineffective. Sulphuric acid is of very doubtful value.

**BRADYCARDIA** (Slow Pulse). May be an indication of heart block (q. v.).

*Atropine* is indicated for diagnostic purposes occasionally.

R. Atropinae sulphatis, .0005–.001 g. (1/120–1/160 gr.)

Take one tablet and repeat if necessary.

Atropine produces cardiac acceleration by paralyzing the vagus terminations. A bradycardia due to simple inhibition and not to degeneration will be removed by it.

**BRAIN TUMOR.** No pharmacological treatment unless syphilitic.

**BREATH** Fetor of. See also Mouth Infection and Tooth Infection.

Examine nose, teeth, tonsils, etc. May be a symptom of Bronchiectasis, Bronchitis, Gangrene, Empyema, etc. Treat gastrointestinal disorder if it exists.

Various mouth washes may be used to combat the symptom. *Phenol* 1/2%, *Formaldehyde* 1/5%, *Permanganate of Potassium* 1/5%, *Thymol* 1/5%.

R. Thymolis.....1/5%  
 Alcoholis.....10%  
 Glycerini.....5%  
 Formaldehydi.....1/5%  
 Aquae q. s. ad 100–200 c. c.  
 Sig. Use as a mouth wash.







R̄. Acidi salicylici . . . . . 1 pt.  
 Acidi tannici . . . . . 1 pt.  
 Acidi borici . . . . . q. s. *ad* 10 pts.  
 Use locally.

R̄. Acidi salicylici . . . . . 1%  
 Pulveris amyli . . . . . 25%  
 Pulveris talci . . . . . 75%  
 M. F. Dusting powder.

R̄. Acidi borici pulveris  
 Orris radicis pulveris  
 Pulveris talci . . . . . aa.  
 M. F. Dusting powder.

**BRONCHITIS.** See also Cough.

Acute B. This may be symptom of acute disease as Influenza (q. v.).

Locally counter irritants and cupping are useful and various household measures appear to give relief such as hot foot bath, warm bath, drink of hot lemonade, or a mustard plaster on chest.

*Opium* is used to check cough and as a diaphoretic especially in the form of Dover's powder.

R̄. Pulveris ipecacuanhae et epii 10% each .5 gm.  
 (8 grains)  
 M. F. Powder or capsule.

*Codein* and *Diacetylmorphine* (Heroin) are extensively used to check cough. Codein is the better and safer. (See cough.)

Chronic B. Many drugs are used: comparatively few are rational or effective.

*Copaiba*, *Cubebs* and *Santol* are used when there is an excessive mucopurulent secretion. They are credited with some action on the bronchial mucous membrane.

- ℞. Copaibae.....1 mil. (15 minims)  
In capsule or emulsion with acacia and some  
flavored water (mint, cinnamon).
- ℞. Oleoresinae cubebae......5 gm. (8 grs.)  
In capsule or emulsion.
- ℞. Olei cubebae......5 mil. (5 minims)  
In capsule or emulsion.
- ℞. Olei santali......5 mil. (5 minims)  
In capsule or emulsion.

All the above require emulsification if taken in solution;  
they may be given in capsules.

- ℞. Copaibae.....m. xv-xx  
Syrupi.....1/3  
Mucilaginis acaciae.....2/3  
M. F. Sig., p. r. n.

*Ammonium Chloride* is frequently prescribed in acute  
and chronic bronchitis.

- ℞. Ammonii chloridi......3 gm. (5 grs.)

For a brief discussion of the action of ammonium  
chloride and its use as an expectorant, see Cough.

*Squilla* is frequently added to mixture in acute and  
chronic bronchitis. The action is two-fold because of the  
cardio-tonic and emetic properties of the drug.

- ℞. Scilla......1 gm. (grs. 1 1/2)  
In pill or capsule.

- ℞. Tincturae scillae.....1 mil. (15 minims)  
In flavored solution.

- ℞. Syrupi scillae.....2 mls. (30 minims)  
P. r. n.







A few combinations containing some of the above drugs may be given for illustration.

The reader is referred to the caption "Cough" where a more complete summary of the drugs and their various combinations is given. Pharmacologically speaking the treatment of bronchitis is that of cough.

R. Ammonii chloridi ..... gr. v  
Tincturae ipecacuanhae et opii (N. F.) m. viii  
Syrupi acidi citrici . . . . . 3ss  
Aquae . . . . . 3ss  
M. F. Sig. 3i p. r. n.

R. Diacetylmorphinae hydrochloridi . . . gr. 1/24  
Ammonii chloridi . . . . . gr. v  
Syrupi scillae . . . . . m. xxx  
Syrupi acidi citrici . . . . . 3ss  
Elixiris simplicis . . . . . q. s. 3ii  
M. F. Sig. 3ii in water, p. r. n.

**BRONCHO PNEUMONIA.** See Pneumonia.

**BRUISES** or (Contusions). See also Sprains.

*Camphor* or *Ammonia* are often used; they act as rubefacients *i. e.*—mild counter irritants.

R. Linimenti camphorae (camphorated oil)  
Apply locally.

R. Linimenti ammoniae  
Apply locally.

Many other substances which produce mild counter irritation and hyperemia are employed—it is not necessary to specify these. Rubbing or massage acts similarly.

*Emollients* (oils and fats) are used as protectives.

R. Adipis benzoinati  
Apply locally.

R. Adipis lanae  
Apply locally.

R̄. Petrolati  
Apply locally.

R̄. Olei olivae  
Apply locally.

R̄. Glycerini.  
Apply locally.

*Note*:—Lead and opium wash is ineffective. See sprains for explanation. Arnica has had considerable reputation as an application to bruises. It has no specific action and is not superior to other volatile oils, for this purpose.

### **BURNS and Scalds.**

Many drugs are used but the chief therapeutic functions to fulfil are protective and antiseptic.

*Lime Liniment* is applied locally as a protective, alone or with antiseptics added.

R̄. Linimenti calcis (lime water, olive or linseed oil  
aa.)  
Apply locally.

R̄. Phenolis.....1-5%  
Linimenti calcis.....q. s.  
Applied locally.

Phenol is not to be used on extensive burns. The anti-septic power of carbolic acid is diminished by being mixed with oil because it has a greater affinity for fats than for watery protoplasm of micro-organisms.

*Dusting Powders* as protectives are used, either in powder form or incorporated into ointments as zinc oxide, boric acid, etc.

R̄. Zinci oxidi  
Amyli .....aa.  
Apply locally.

V. 40. 30. 11.

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R̄. Acidi borici.....5-10%  
 Lanolin  
 Apply locally.

R̄. Zinci oxidi. ....10-20%  
 Lanolin  
 Apply locally.

*Picric Acid* 1% has been extensively used in burns; it precipitates the proteids. It is not entirely harmless and besides it is not specific in its action in this condition.

R̄. Acidi picrici.....1%  
 Alcoholis.....5-10%  
 Aquae.....q. s. 100

*Sodium bicarbonate* is used in the form of a lotion.

R̄. Sodii bicarbonatis...5-10%  
 Normal salt solution.....q. s.  
 Apply locally.

In very serious burns the continuous bath is used—the treatment becomes surgical. Symptoms may require treatment—especially Pain and Shock q. v. Immersion in normal salt solution may be required.

**BURSITIS.** May require surgical treatment. Counter irritation (tincture iodine) is often used.

**CALCULUS.** During the passage of calculi of various kinds, the colicky pain may require treatment (v. Colic also Pain).

Renal C. *Potassium Citrate* is used to correct high acidity in uric acid and oxalate calculi. The citrates become converted into carbonates in the blood, and reduce urinary acidity.

R̄. Potassi citratis.....1-3 g. + (15-45 gr.)  
 A dose night and morning of 10 gm. will keep the acidity low. Treatment should be interrupted.

*Benzoates* are also used. Benzoic acid and hexamethylenamine are used in phosphatic calculi. Benzoic acid is eliminated in the urine as hippuric acid thus acidifying the urine.

*Hexamethylenamine* acts as an antiseptic in the urinary passages and perhaps also as a solvent.

- ℞. Acidi benzoici . . . . . .5 gm. (8 grs.)  
In powder or pill.
- ℞. Sodii benzoatis . . . . . 1 gm. (15 grs.)  
In solution or powder.
- ℞. Hexamethylenaminae . . . . . grs. iv  
In powder, tablet or solution.
- ℞. Potassii citratis . . . . . grs. xv  
Saccharated sodium bicarbonate . . . q. s. (3 ss)  
Saccharated tartaric acid . . . . . q. s. (3 ss)  
Saccharated citric acid . . . . . q. s. (3 ss)  
M. F. Pulvis effervescens  
Heaping teaspoonful in water. Keep in tightly  
corked container.
- ℞. Sodii benzoatis . . . . . grs. xv  
Hexamethylenaminae . . . . . grs. iv  
Saccharated sodium bicarbonate . . . 3 ss  
Saccharated tartaric acid . . . . . 3 ss  
Saccharated citric acid . . . . . 3 ss  
M. F. Pulvis effervescens. Heaping teaspoon-  
ful in water.

**Biliary C.** This is chiefly a surgical condition. There is no effective pharmacological treatment as far as dissolving the stone is concerned.

*Salicylic Acid* and *Hexamethylenetetramine* are eliminated in the bile particularly the latter drug and they may be rationally employed to diminish the effects of biliary infections.

- ℞. Hexamethylenaminae . . . . . .25 gm. (4 grs.)  
In tablet, capsule or solution in water or as  
effervescent solution as follows:







℞. Hexamethylenaminae.....grs. iv  
 Saccharated sodium bicarbonate...3ss  
 Saccharated tartaric acid.....3ss  
 Saccharated citric acid.....3ss  
 M. F. Pulvis effervescens  
 Sig. Heaping teaspoonful at dose. Keep in  
 tightly corked container.

Olive oil has been extensively used in gall stones, but as a matter of fact it has no effect whatever on the secretion of bile. It is an emollient and has therefore a protective action in the stomach and bowel. It also possesses a high food value but it will not dissolve gall stones nor cure cholelithesis.

℞. Olei olivae. ....q. s.  
 Wine glassful, t. i. d.

**CANCER.** No pharmacological treatment exists. Treatment by operation, by X-ray and radium are the only means we at present possess. The great developments which have taken place in the massive doses of X-ray radiation in recent years have brought this physical method of treatment into great prominence as an adjunct to the older and tried methods of surgery.

Arsenic is sometimes used in superficial epitheliomas as a caustic but is being more and more discarded in favor of X-ray radiation.

In inoperable uterine cancer strong solutions, zinc chloride (50%) are sometimes used but are only of secondary importance.

**CARBUNCLE.** See Abscess.

Examine urine for sugar. Treatment is largely surgical—no very effective pharmacological treatment although a few drugs retain an empirical hold, particularly Quinine and Salicylates. (See under Abscess.) Autogenous vac-cinotherapy is used; results doubtful.

**CARDIAC DISEASE.** See Heart Disease.

**CARIES.** C. of Bone. Treatment chiefly surgical.

*Phosphorus* has been used but the cases recorded are insufficient to permit of definite judgment as to results.

R̄. Phosphori . . . . . .0005 gm. (gr. 1/120)  
Ft. in pill or oily solution.

R̄. Olei phosphorati (N. F.). This is a 1% solution in expressed almond oil and ether .05 mil. (1 minim).  
Ft., frequently taken in cod liver oil emulsion.

R̄. Pilulae phosphori  
Dose: 1 pill.

C. of Teeth. Treatment chiefly surgical. Arsenic is used locally to destroy the pulp and nerve structures.

**CATARRH.** (Common cold, Coryza). See also Influenza. If there is frequent catching of cold, examine nose for turbinate hypertrophy, sensitive spots; throat for enlarged tonsils or adenoids; also chest. Drugs used are legion; those rationally indicated are much fewer.

*Ipecac* and *Opium* in the form of Dover's powder are effective in incipient catarrh. Other opium preparations may be used.

R̄. Pulveris ipecacuanhae et opii. . .5 gm. (8 grains)  
In powder, pill or capsule.

The *Salicylates* are occasionally effective, probably aetiotropic for some forms, *i. e.* acting upon the cause.

Aspirin is a good form in which to prescribe salicylates. Aspirin is diacetylsalicylic acid.

R̄. Acidi diacetylsalicylatis\* . . . . .1 gm. (15 grs.)  
In powder, capsule or mixture (mucilage of acacia).

*Quinine* is occasionally effective; probably aetiotropic in some forms.

\*Aspirin: unofficial.





R̄. Quininae sulphatis . . . . . .1 gm. (1 1/2 grs.)  
In capsule or acid sol.

*Atropin* is effective to dry secretions in catarrh when these are especially abundant.

R̄. Atropinae sulphatis . . . . .0005 gm. (1/120 gr.)

*Hexamethylenetetramine* is a rational drug in treating middle ear and sinus involvement, since it is eliminated in the secretions from these parts. The practical results, however, are somewhat dubious.

R̄. Hexamethylenaminae . . . .25 gm. (4 grs.)  
In capsule, tablet, powder or watery solution.

R̄. Hexamethylenaminae . . . . .grs. iv  
Effervescent salts . . . . .q. s.  
M. F. Heaping teaspoonful at dose.

Hexamethylenamine should be given alone, apart from other medicines as a rule, on account of its instability. Some rational combinations of the above drugs can be made.

The local treatment of catarrh by means of sprays is much in vogue. Solutions of *Menthol* and *Eucalyptol*, one or two per cent in aboleine, or menthol, camphor and eucalyptol in Oil of Pine aa. are used in a nasal inhaler (not spray).

The author discovered in 1910 that hexamethylenamine is eliminated by the mucous membrane of the middle ear and nasal sinuses. Since which time this drug has been used in various catarrhal states. Only minor results have been obtained, however, the quantity eliminated in this way being probably too small.

Exercises in combinations of the above drugs.

R̄. Quininae sulphatis . . . . .gr. iss  
Atropinae sulphatis . . . . .gr. 1/120  
Pulveris ipecacuanhae et opii . . . . .gr. viii  
Extracti gentianae . . . . .q. s.  
M. F. pill.

R̄. Codeinae sulphatis.....gr. ss  
 Atropinae sulphatis.....gr. 1/120  
 Acidi diacetylsalicylatis.....gr. v  
 Cinchonidinae salicylatis.....gr. iiss  
 M. F. Capsule or konseal.

R̄. Codeinae sulphatis.....gr. 1/4  
 Acetphenetidini.....gr. ii  
 Aspirin.....gr. iv  
 Cinchonidinae salicylatis.....gr. i  
 M. F. capsule or konseal, q. 2 hours. In this prescription the doses given are less than the U. S. P. average doses for two reasons. First the medicine is to be put into capsules whose size must be limited. Second the dose is to be frequently repeated until the effects are obtained.

*Note*.—Chronic recurrent coryza is much treated with autogenous and heterogenous vaccines, of different organisms with very uncertain results.

**CHALAZION** (Stye). Medical treatment same as in Blepharitis (q. v.).

**CHAFING**. Dusting powders are used as protectives, as bismuth, zinc oxide, lycopodium, talc, etc.

R̄. Bismuthi subnitratis.....5%  
 Zinci oxidi.....5%  
 Lycopodii

R̄. Thymolis.....5%  
 Zinci oxidi.....5%  
 Lycopodii.....q. s. 100  
 Olei rosae, few drops.

Usually it is most convenient to use ordinary commercial dusting powders; talcum is popular.







**CHANCER.** The primary lesion of syphilis (q. v.). Specific treatment, especially salvarsan, should be immediately used (see syphilis). Cauterization and disinfection are useful.

A solution of silver nitrate 10% may be applied to cauterize chancres; to remove excess of silver a solution of common salt is used, which converts the soluble nitrate of silver into insoluble chloride; pure formaldehyde may be used after cocainization.

Iodoform locally applied has been much employed; many other dusting powders are quite extensively used: as boracic acid, calomel, aristol, bismuth, etc. There is nothing specific in their effects. They all act by absorbing secretions and as protectives.

**CHANCROID.** Treatment is entirely local and in this direction is the same as the local treatment of chancre and consists fundamentally in the use of caustics, anti-septics and protectives.

**CHAPPING.** Wearing gloves is an important prophylactic measure.

*Emollients* as protectives are used such as cold cream (unguentum aquæ rosæ); glycerite of starch; boroglycerin; boric acid or zinc oxide in lanoline, etc:

R.	Resorcini.....	2%
	Phenolis.....	1/4-1/2%
	Glycerinae.....	20%
	Aquæ rosæ.....	q. s. ad 100
	M. F. lotion.	
	Sig. Locally several times daily.	

**CHICKEN POX.** No special pharmacological treatment.

**CHILBLAINS.** Warmth and dry friction may relieve pain. *Protectives* are locally applied, as the *Emollients*, etc. A great variety of substances are often incorporated in these, showing that the effects are not specific; lard,

lanolin, vaselin, olive oil and glycerin may be mentioned as examples of the emollients used.

R̄. Adipis benzoinati  
Apply locally.

R̄. Adipis lanae  
Apply locally.

R̄. Petrolati  
Apply locally.

R̄. Olei olivae  
Apply locally.

R̄. Glycerinae  
Apply locally.

If the skin is unbroken a light coat of iodine may be useful.

**CHILLS.** See also Fever.

Often a symptom of beginning infectious disease, malaria, pyelitis, pneumonia, sepsis, etc.

*Teas* or *Infusions* are used as diuretics or diaphoretics. They are usually made from the crude drugs of the volatile oil series. The virtue seems to reside, however, in the hot water rather than the trace of oil.

Peppermint, spearmint and chamomile tops are most used - a tablespoonful of the herb is used to one or two cupfuls of hot water.

*Camphor* prevents chill by dilating the skin vessels.

R̄. Spiritus camphorae . . . . . 1 mil. (15 minims)  
Given diluted in water or whisky and water.

*Alcohol* relieves chill by dilating the skin vessels.

R̄. Spiritus frumenti . . . . . ℥i +  
Sig. Diluted when taken.





R̄. Spiritus vini gallici . . . . . ʒ ss +

Sig. Usually taken undiluted.

*Ipecacuanha* is useful, especially combined with opium as in Dovers powder. Ipecac produces a mild diaphoresis by virtue of its emetic action. Opium acts oppositely on the sweat secretion (stimulation) to its action upon all other secretions (inhibition)—the explanation is unknown.

R̄. Pulveris ipecacuanhae et opii, 10% opium, .5 gm. (8 grains)

Sometimes a hypodermic injection of morphine may be indicated when chill is severe, prolonged and not readily relieved by simpler means.

**CHLOASMA** (Freckles). The effect of drugs is somewhat doubtful. Pigmentation of the skin may denote Addison's Disease.

*Mercury* solutions locally are much used.

R̄. Hydrargyri chloridi corrosivi . . . . . gr. xv

Olei rosae . . . . . gr. iii

Alcoholis . . . . . 200

Aquae . . . . . 800

M. F. Solution.

Sig. Apply night and morning after bathing.

*Hydrogen peroxide* is also used for its supposed bleaching power.

R̄. Liquoris hydrogenii dioxidi (3% by weight H<sub>2</sub> O<sub>2</sub> each vol. 9-11 vol. of oxygen).

Sig. Apply locally.

*Alkaline lotions* are used (lime water) together with protective emollients as cold cream.

R̄. Liquoris calcis

Sig. Apply locally.

R. Unguenti aquae rosae  
Sig. Apply locally.

*Dilute Nitric Acid* is also used (1-250).

**CHLOROSIS.** See Anemia Chlorotic.

**CHOLERA.** Abundant fluids, stimulants, hot soups and broths are indicated. Vomiting (q. v.) and collapse (q. v.) may require special treatment.

Pharmacological treatment unsatisfactory.

No drug is specially indicated. Morphine may be necessary to control excessive peristalsis. (See under pain in diarrhoea.)

Anti Cholera vaccine is used; results sub judice.

Saline infusions per rectum are used.

Large enemata containing tannic acid are used.

**CHOLERA MORBUS.** See also Gastro Enteritis.

Counter irritation to epigastrium (mustard) may relieve pain.

*Purgatives* are often useful, particularly *Oleum Ricini* ℥ss-1, taken in acacia emulsion flavored with sugar or some volatile oil or in wine, spirits or glycerine.

R. Olei ricini.....15 mls. (℥iv)  
Tincturae vanilli.....q. s. to flavor  
Syrupi acaciae.....q. s. to dose  
M. F. emulsion.  
Sig. Take at once.

Diarrhoea may require treatment (q. v.)

**CHORDEE.** See also Gonorrhoea.

Locally cold applications are employed. Drugs which depress the sensory function of the central nervous system are much used.

(1) The methane narcotics (*Chloral*); (2) alkaloid narcotics (*Opium*) (*Hyoscine*); (3) the *Bromides*.

- ℞. Chlorali hydrati. . . . . .5 gm. (8 grs.)  
In dilute solution, often in syrup.
- ℞. Opii pulveris, or deodorati or granulati .06 gm.  
(1 gr.)  
In powder, pill or capsule.
- ℞. Extracti opii. . . . . .03 gm. (1/2 gr.)  
In pill or capsule.
- ℞. Tincturae opii or tincturae opii deodorati (both  
10%) . . . . . .5 mil. (8 minims)  
In flavored solution.
- ℞. Scopolaminae\* hydrobromidi, .0003 gm. (1/200  
gr.)  
In tablet, triturate or solution.
- ℞. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)  
In watery solution flavored with syrup and  
volatile oil preparations (as peppermint water)  
taken well diluted.

Combinations of the above may be made:

- ℞. Chlorali hydrati. . . . . .5 gm. (8 grs.)  
Potassii bromidi . . . . . 1 gm. (15 grs.)  
Syrupi auranti  
Aquæ. . . . . aa. q. s.  
M. F. Sig. 3i or 3ii to dose.

**CHOREA.** In severe cases rest and isolation are necessary. Examine for errors of refraction, adenoids, hypertrophied tonsils, worms, hemorrhoids, peripheral irritation. Chorea is often associated with rheumatism (q. v.). Anemia may require attention (q. v.) There is a remarkable liability to acute endocarditis (q. v.)

The *Bromides* are sometimes used with success, also *Chloral*.

\*Same as hyoscine.



## THERAPEUTIC INDEX

R̄. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)  
In flavored solution (peppermint water).

R̄. Ammonii bromidi. . . . . 1 gm. (15 grs.)  
In flavored solution or in watery solution flavored  
with syrup and volatile oil preparations, taken  
well diluted.

R̄. Chlorali hydrati. . . . . .5 gm (8 grs.)  
In flavored solution.

Many cases seem to improve under *Arsenic*, modus operandi unknown. Clinical evidence in its favor quite unequivocal.

R̄. Arseni trioxidi. . . . . .002 gm. (1/30 gr.)  
In pill or solution after meals.

R̄. Liquoris acidi arsenosi or

R̄. Liquoris potassii arsenitis (both 1%)  
.2 mil. (3 minims)  
3 drops three times daily after meals; gradually  
increased if necessary to 15 or 20 drops or  
more. Look out for intolerance (puffy eyelids,  
diarrhoea, abdominal pain).

The *Salicylates* are useful if associated with rheumatism.

R̄. Sodii salicylatis. . . . . 1 gm. (15 grs.)  
In capsules, tablets or flavored solution.

R̄. Acidi diacetylsalicylici\* (Aspirin), 1 gm. (15 grs.)  
In capsules or in mixture with acaciae and orange  
syrup.

R̄. Potassii bromidi . . . . . grs. v-xv  
Liquoris potassii arsenitis. . . . . m. iii  
Sodii salicylatis. . . . . grs. v-xv  
Elixiris aurantii. . . . . 3i  
M. F. Sig. 3i, p r. n.

\*Not official.





℞. Acidi acetylsalicylici . . . . . grs. v-xv  
 Mucilaginis acaciae . . . . . q. s.  
 Syrupi aurantii  
 Aquæ . . . . . aa.  
 M. F. Sig. p. r. n.

*Note.*—Valerian, cimicifuga and compounds of zinc, silver and copper have been much used in Chorea but even the empirical support they formerly enjoyed has almost disappeared.

**CHOREA SENILIS.** Scopolamine (Hyoscine)\* is often used beneficially.

℞. Scopolaminae hydrobromidi, .0003 gm. (gr. 1/200)  
 In tablet or flavored sol., p. r. n.

**CIRRHOSIS** (Hepatic). If alcoholic, this cause should be removed. Tapping may be necessary; surgical treatment may be considered. There is no effective pharmacological treatment unless the disease is syphilitic (positive Wasserman). In this case the treatment should of course be anti-syphilitic (q. v.).

*Iodide of Potassium* and *Addison's* (Niemeyer's) *Pill* simultaneously or in series is a rational treatment and has the sanction of high authority.

Addison's or Niemeyer's Pill is as follows:

℞. Hydrargyri chloridi mitis . . . . . gr. ss.—1 1/2  
 Pulveris digitalis . . . . . gr. i  
 Pulveris scillae . . . . . gr. i  
 M. F. Pill.

Take one t. i. d. Look out for mercurialism.  
 The average alterative dose of calomel U. S. P. IX is .015 gm. (1 1/2 grs).

\*These substances are isomeric.

Of course the same effect of diuresis and catharsis may be produced in other ways as for example by the combined use of *Mercury* and *Resin Purge (Jalap)* and *Saline*:

R̄. Hydrargyri chloridi mitis.....gr. ss.—1 1/2  
 Pulveris jalapae compositae\*.....gr. xv—xxx  
 Pulveris zingiberis (flavor).....gr. ii  
 M. F. Pulver. Take p. r. n.

Ordinary renal diuretics do not relieve portal tension and are not used.

**COLD.** See Influenza.

**COLIC** Intestinal. See also Cholera Morbus.

Recurrent attacks may be due to lead poisoning, to gastric ulcer, appendicitis, etc. *Ether* and *Chloroform* are effective through a carminative action in the treatment of colic provided there is no peritonitis.

R̄. Spirit of ether..... 4 mls. (3i)  
 Taken diluted.

R̄. Spirit of chloroform..... 2 mls. (30 minims)  
 Taken diluted.

R̄. Spiritus aetheris compositi,  
 N. F., Hoffman's Anodyne,.... 4 mls. (3i)  
 Taken diluted.

*Volatile oils* particularly those of peppermint, cinnamon, anise and lavender act similarly through a carminative effect. Ginger seems especially effective.

R̄. Olei menthae piperitae or other volatile oil.  
 Average dose U. S. P. .2 mil. (3 minim). Given  
 on sugar.

\*This contains Jalap and Potassium Bitartrate. Average dose U. S. P. 2 gm. (30 grs.)





R̄. Spiritus menthae piperitae or other spirit.  
Average dose U. S. P. 2 mils. (30 minims) diluted.  
Take diluted.

R̄. Tincturae zingiberis. . . . . 2 mils (30 minims)  
Taken diluted.

*Opium* is used to relieve the pain of colic, likewise the methane narcotics, *Chloral* and *Alcohol*, always followed by purgatives. *Opium* is only to be used in abdominal pain after a correct diagnosis has been made.

R̄. Morphinae sulphatis. . . . . .008 gm. (1/8 gr.)  
By mouth or hypodermically.

R̄. Tincturae opii. . . . . .5 mil. (8 minims)  
In flavored menstruum as anise or cinnamon  
water.

R̄. Tincturae opii camphoratae (Paregoric)  
4 mils. (3i)  
One to fifteen drops; .3–1 c. c. for child  
Taken diluted.

R̄. Chloralis hydratis. . . . . .5 gm. (8 grs.)  
In peppermint or other water or elixir.

If constipation attends colic it should be treated by purgatives, vegetable, mercurial, saline, etc. (See constipation).

*Atropine* is sometimes of great service in lessening the disordered movements of the bowel. The action is upon some mechanism distinct from that of normal peristalsis.

R̄. Atropinae sulphatis. . . . . .0005 gm. (1/120 gr.)  
By mouth or hypodermic injection.

Locally hot fomentations, poultices, or turpentine stupes are used. They act reflexly.



A rational combination might be *Carminative + Opium + Belladonna* as:

**or:**

**R.** Spiritus chloroformi . . . . . 2 mls. (30 minims)  
 Spiritus menthae . . . . . 2 mls. (30 minims)  
 Tincturae opii camphoratae . . . . . 4 mls. (3i)  
 Spiritus vini gallici (brandy), q. s.  
**M. F. Sig.** Diluted, p. r. n.

In colic due to lead poisoning, *Opium* allays the pain and the spasm of the bowels without entirely stopping peristalsis.

**R<sub>x</sub>. Extracti opii . . . . .03 gm. (gr. 1/2)**  
**In pill.**





- R̄ Morphinae Sulphatis or hydro-chloridi . . . . . .008 gm. (1 minim)  
By mouth or hypodermically.

*Croton Oil* is an efficient laxative in lead colic.

- R̄. Olei tiglii . . . . . .05 gm. (1 minim)  
Given in pill made with bread crumbs or single drop on sugar or in castor oil.

The *Iodides* are generally prescribed since they are supposed to hasten elimination. How far they accomplish this has not been fully determined experimentally nor is it known that the iodides are more effective than the chlorides or bromides. In using iodides, saturated solution of potassium iodide is usually employed.

- R̄. Potassii iodidi\* . . . . . .30 gms. ℥i  
Aquæ destillatae . . . . . q. s. ad 30 mils. i℥  
Give in drop doses progressively increasing up to 10 or more, t. i. d. Each drop contains a grain.

*Purgation*, usually with salines, is a routine part of this treatment.

- R̄. Magnesii sulphatis†  
  
Aquæ destillatae  
M. F. Saturated Solution q. s.  
Sig. ℥i every morning or so.

Combinations of *Opium* with *Purgatives* are given.

- R̄. Pulveris opii . . . . . .1 gr. (.06 gm.)  
Extracti belladonnae foliorum . 1/4 gr. (.015 gm.)  
Olei tiglii . . . . . m. i (.06 mil.)  
M. F. pill.  
Sig. Take one pill every two or three hours if necessary.

\*Average dose KI, U. S. P. IX, .3 gm. (5 grs.)

†Average dose MgSo<sub>4</sub>, U. S. P. IX. 15 gms. (3iv)

**COLITIS.** See Enterocolitis.

**COLLAPSE** or fainting. See also Shock. The vaso-motor and respiratory centres are depressed.

Keep the head low. Apply cold to face (reflex-stimulation.)

*Camphor* is used as a reflex stimulant to the central nervous system. For further discussion of camphor as stimulant see Shock.

R̄. Spiritus camphorae. . . . . 1 mil. (15 minims)  
Given diluted, p. r. n.

*Atropine* is indicated, occasionally as a respiratory stimulant. It is given hypodermically to insure more rapid action.

R̄. Atropinae sulphatis . . . . . .0005 gm. (1/120 gr.)  
Hypodermic injection.

*Caffein* is an effective stimulant of the brain and medulla. Sodium benzoate or salicylate are added to effect solution.

R̄. Caffeinae . . . . . .15 gm. (2 1/2 grs.)  
Sodii benzoatis . . . . .15 gm. (2 1/2 grs.)  
Aquæ destillatae . . . . .q. s. *ad* 10.00  
Make solution in hot water. Caffeine sodio-benzoate is formed. Each c. c. equals .25 gm. caffeine. Dose one c. c. hypodermically. Average dose of the official powder, caffeine sodio-benzoate U. S. P. IX, by mouth .3 gm. (grs. v), hypodermic .2 gm. (grs. 3).

R̄. Caffeinae . . . . . .4.  
Sodii salicylatis . . . . .3.00  
Aquæ destillatae . . . . .q. s. *ad* 10.00  
Each c. c. equals .40 caffeine.  
Give hypodermically, dose 1, 2 c. c. Caffeine sodio-salicylate is not official.





## R. Caffeinae

Sodii benzoatis. . . . .aa. .15 gm. (grs. 2 1/2)

Syrupi (raspberry or other) . . . . .1/4th

Aquæ . . . . .3/4ths

M. F.

Dose internally. Peppermint water may be used as a vehicle.

The  $\text{NH}_3$  gas given off from *Ammonium Carbonate* is often inhaled to elicit reflex stimulation of the medullary centres. Taken internally for the same purpose, Ammonium carbonate acts through a gastric reflex. Ammonium carbonate is not a pure carbonate but contains some carbamate  $\text{NH}_4\text{NH}_2\text{CO}_2$ ; it releases  $\text{NH}_3$  in the air.

R. Ammonii carbonatis . . . . .q. s.

Spts. lavendulae . . . . .q. s.

Smelling salts. Inhale carefully. Lumps of ammonium carbonate are added to the spirit.

R. Ammonii carbonatis . . . . .3 gm. (5 grs.)

In dilute solution using a flavored water.

R. Spiritus ammonii aromatici, 2 mls. (30 minims)

In glass of water.

**COMA.** Coma may be due to a variety of causes: cerebral hemorrhage, thrombosis or embolism, cerebral compression from trauma or tumor, epilepsy, uremia, diabetes poisoning from opium, alcohol or other narcotics, etc. Of course the treatment depends upon the cause.

**CONDYLOMATA.** See also Warts. May be syphilitic (q. v.)

Non-syphilitic condylomata are treated successfully by operation and X-ray.

*Mercury* in the form of calomel is often applied locally to luetic condylomata.



- R̄. Hydrargyri chloridi mitis.....20  
 Amyli.....40  
 Talci purificati.....40  
 M. F. powder. Apply locally.

**CONGESTION OF THE BRAIN** (with Coma). May be uremic, toxic, or due to pressure.

A sharp purge, either *Croton Oil* or one of the Jalap and Colocynth series, is generally used, particularly *Elaterin*.

- R̄. Olei tiglii..... .05 mil (1 minim)  
 In pill made up with bread crumbs or single drops on lump of sugar.
- R̄. Triturationis elaterini (1 pt. elaterin, 9 pts. sugar milk)..... .03 gm. (1/2 gr.)  
 In powder or capsule with milk sugar or in pill.

**CONJUNCTIVITIS.** See also Ophthalmia. Examine eyes for error of refraction. Antiseptic and astringent drugs are used as lotions and drops, especially boric acid, zinc sulphate, alum, nitrate of silver, organic silver preparations (protargol 1/2–2%, argyrol 5%).

- R̄. Acidi borici.....2–4%  
 Aquae destillatae  
 Drop in eye, p. r. n.
- R̄. Zinci sulphatis.....1/2%  
 Aquae destillatae  
 Drop in eye, p. r. n.
- R̄. Aluminis.....1/2%  
 Aquae destillatae  
 Drop in eye, p. r. n.
- R̄. Argenti nitratis.....1/4–1/2%  
 Aquæ destillatae  
 Drop in eye, p. r. n.





**CONSTIPATION.** Hygienic and dietetic treatment very important and effective. It must be remembered that constipation is a symptom of many diseases organic and functional and that treatment should combat the cause. Drugs while of importance will always be secondary to removal of the cause and to hygiene and dietetic measures. As to the use of drugs in constipation, experience has shown that they should not be used over long periods of time. Obstructive forms of constipation may require surgical help. The number of drugs which possess cathartic action is very large, particularly those belonging to the saline and vegetable classes. The indications for particular cathartics based upon variations in their physiological action are not always obvious and it cannot be disputed that the applications of particular cathartics to the treatment of constipation remains somewhat empirical.

The *Saline Cathartics* are largely used. They increase the fluidity of the intestinal contents. In larger quantities they attract fluid from the blood by increasing osmotic pressure in the bowel. This is due to their impermeability. Salines act more rapidly than vegetable purgatives. Chronic constipation, due to sedentary habits, is often relieved by salines taken in the morning.

- R̄. Sodii sulphatis (Glaubers Salt) 15 gms. (℥iv).  
Given dissolved in water, often given in saturated solution. Water will dissolve about its own weight of the salt.
- R̄. Magnesii sulphatis (Epsom Salt), 15 gms. (℥iv)  
Used often as saturated sol. Dose ℥ss-℥i.  
Water at ordinary temperature will dissolve about its own weight of the salt.
- R̄. Sodii phosphatis . . . . . 4 gms. (℥i)  
Given in water in which it is quite soluble.  
It is often given to children as powder in jelly or in milk or in solution as follows:

- ℞. Sodii phosphatis . . . . . gr. i  
 Syrupi mannae  
 Aquæ anisi . . . . . aa. q. s.

Dose, t. i. d. For a child under one year.

- ℞. Liquoris sodii phosphatis compositi N. F. q. s.  
 Average dose, 8 mls (℥ii).

- ℞. Magnesii oxidi or  
 Magnesii oxidi ponderosi . . . . . 2 gms. (30 grs.)  
 In powder. The substance is insoluble in water.

- ℞. Magnesii carbonatis . . . . . 3 gms. (45 grs.)  
 In powder.

- ℞. Pulveris effervescentis compositi (Seidlitz powder)  
 Blue paper—Rochelle salt, 8.5 g.; sodium bicarbonate 2.8 g.  
 White paper—tartaric acid 2.3 g.  
 The total when mixed equals about 14 g. or ℥iiss  
 Dose one set of two powders.

Many salines may be given in effervescent form. Examples are as follows:

- ℞. Liquoris magnesii citratis U. S. P.  
 Sig. Usually in single dose in tightly corked bottle. Average dose 350 mls. (℥xii)
- ℞. Liquoris magnesii sulphatis effervescentis N. F.  
 Sig. Single dose, contents of bottle 350 mls. (℥xii)

In ordinary constipation of short standing mild laxatives of the *Vegetable Purgative* series are used, as (1) Castor Oil, (2) Senna, (3) Rhubarb, (4) Aloe, (5) Frangula, (6) Cascara.





- (1)  $\mathcal{R}$ . Olei ricini. . . . . 15 mls. (3iv)  
In emulsion with sugar, acacia and volatile oil  
or in wine, spirits, glycerin, peppermint water,  
soda water or flexible capsule.
- (2)  $\mathcal{R}$ . Confectionis sennae N. F. . . . . 4 gm. (60 grs.)  
3i or more at bedtime.
- $\mathcal{R}$ . Fluidextracti sennae . . . . . 2 mls. (30 minims)  
In solution alone or combined.
- $\mathcal{R}$ . Infusi sennae compositi . . . . . 120 mls. (3iv)  
Alone at bedtime.
- $\mathcal{R}$ . Syrupi sennae. . . . . 4 mls. (3i)  
For children particularly.
- $\mathcal{R}$ . Pulveris glycyrrhizae compositi. . . 4 gms. (3i)  
Mixed in water.
- (3)  $\mathcal{R}$ . Extracti rhei . . . . . .25 gms. (4 grs.)  
In pill, alone or combined.
- $\mathcal{R}$ . Fluidextracti rhei . . . . . 1 mil. (15 minims)  
In solution alone or combined.
- $\mathcal{R}$ . Pilulae rhei compositae  
Average dose: 2 pills at meals or bedtime
- $\mathcal{R}$ . Pulveris rhei compositi (Gregory Powd.)  
(rhubarb, magnesia) . . . . . 2 gms. (30 grs.)  
In powder mixed with water when taken.
- (4)  $\mathcal{R}$ . Aloini. . . . . .015 gm. (1/4 gr.)  
In pill, alone or combined.
- $\mathcal{R}$ . Extracti aloes N. F. . . . . .125 gm. (2 grs.)  
In pill, alone or combined.
- $\mathcal{R}$ . Pilulae laxativae compositae (aloin, strychnine,  
belladonna, ipecac)  
2 pills at bedtime.



- R̄. Tincturae aloes . . . . . 2 mils. (30 minims)  
In solution alone or combined.
- (5) R̄. Fluidextracti frangulae . . . . . 1 mil. (15 minims)  
In water alone or combined.
- (6) R̄. Extracti cascarae sagradae . . . . . 25 gm. (4 grs.)  
In pill alone or combined.
- R̄. Fluidextracti cascarae sagradae  
1 mil. (15 minims)  
In sol. alone or combined.

In chronic constipation not controlled by hygiene and dietary (prunes, coarse meal) Colocynth and Podophyllum so-called *Resin Purgatives* are much used.

- (1) R̄. Extracti colocynthidis . . . . . .03 gm. (1/2 gr.)  
In pill alone or combined.
- R̄. Extracti colocynthidis compositi .25 gm. (4 grs.)  
(Colocynth, aloes, scammony)  
Pill alone or combined.
- R̄. Pilulae catharticae compositae (colocynth, jalap,  
gamboge, calomel).  
Average dose two pills.
- R̄. Pilulae catharticae vegetabilis N. F. (colocynth,  
jalap, leptandra, podophyllum)  
Average dose two pills.
- (2) R̄. Fluidextracti podophylli . . . . . .5 mil. (8 minims)  
Solution alone or combined.
- R̄. Resinae podophylli . . . . . .01 gm. (1/6 gr.)  
Pill alone or combined.

If mania or unconsciousness exist croton oil can be used as an efficient purgative.



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- R<sub>j</sub>. Phenolphthalein . . . . . gr. iiss**  
**Oleosacchari anisi . . . . . q. s.**  
**Powders. Take p. r. n.**

*Agar* or agar-agar is used considerably of late in constipation. It consists principally of indigestible gelose and acts apparently by absorbing water swelling up and thus increasing the bulk of the stools. Average dose U. S. P. IX 10 gms. (℥ii). It is administered in substance coarsely comminuted and taken in water or mixed with food (bread dough, oatmeal). Just now it seems to be quite popular.

*Light hydrocarbon oils* (unofficial), under a great variety of trade names (albolene, etc.) have become popular as so-called intestinal lubricants in constipation. They are given at bedtime in doses of ℥ss-℥ii floated on water. They are tasteless and pass through the alimentary tract completely unchanged.

*Sulphur* is used as an aperient powder and may be added to rhubarb or magnesia for this purpose. Sulphur is itself inert but it is changed to sulphide and hydro-sulphuric acid in the intestine, the irritant action of which produces purgation.

℞. Sulphuris loti, precipitati or sublimati 4 gms. (℥i)  
In powder or tablet.

℞. Pulveris glycyrrhizae compositae (sulphur-senna) 4 gm. (℥i)  
Take mixed with water.

℞. Pulveris rhei compositae (rhubarb+magnesii)  
2 gms. (30 grs.)  
M. F. powder. Take on tongue or mixed with water.

℞. Pulveris glycyrrhizae compositae  
Pulveris rhei compositi aa.  
In powder, p. r. n.: will contain sulphur, senna, rhubarb and magnesia.

Finally, various *Enemata* are useful in constipation, the chief of which are water enemas, water and salts, water and soap, water and glycerine, or glycerine suppositories U. S. P.





*Physostigmine* or *Eserine* produces powerful contractions of the bowel by stimulation of certain motor receptors in the bowel wall. On account of this action it is used in states of intestinal paresis as post anesthetic, post operative, etc.

R̄. *Physostigminae* or *eserinae salicylatis* .001 gm.  
(gr. 1/60)

P. r. n. By hypodermic injection.

Some illustrative cathartic combinations:

A limited number of combinations of cathartic drugs will be given as illustrations.

They will not be multiplied because of the absurdity to which this species of drug combination has been carried without any commensurate advantage. The indications for special purgatives seem to be extremely limited outside of the general class indications above, which are founded upon the well known differences of action between the various groups of purgatives. Certain groups or combinations of cathartics appear to be more effective or more satisfactory than single drugs, perhaps because they act simultaneously upon different mechanisms in the bowel.

Vegetable purgative groupings:

R̄. Aloini. . . . . gr. 1/4  
Resinae podophylli. . . . . gr. 1/6  
Extracti belladonnae foliorum . . . . gr. 1/4  
Strychninae sulphatis. . . . . gr. 1/40  
M. F. pill—one to three at bedtime or one after meals.

Vegetable purgatives + Bile:

R̄. Aloini. . . . . gr. 1/4  
Resinae podophylli. . . . . gr. 1/6  
Extracti fellis bovis. . . . . gr. 1 1/2  
Ipecacuanhae\*. . . . . gr. 1/10  
M. F. pill. Same as above.

\*Average dose of Ipecac given in U. S. P. is the *Emetic* dose 1 gm. 15 grs.



**Vegetable purgatives + Phenolphthalein + Bile:**

**R.** Same as above formula with exception of substitution of phenolphthalein .15 gm. (iiss grs.) for podophyllum.

(One extremely common combination of purgatives consists of Saline + Resin Purgative or Saline + Anthracene purgative (aloe group).

**Saline + Resin Purgative:** A good example is Comp. Jalap Powder. This powder produces watery catharsis and is especially adapted for depletion as in certain forms of dropsy.

**R.** Pulveris jalapae compositi ( $\frac{1}{3}$  Jalap,  $\frac{2}{3}$  potassium bitartrate) 2 gms. (30 grs.)  
Given mixed in water and repeated one to three times daily according to results.

**Saline + Anthracene Purgative.** A good example is Compound Rhubarb Powder (Gregory's powder). This powder is adapted to dyspeptic conditions with constipation or diarrhoea.

**R.** Pulveris rhei compositi (1 4 rhubarb,  $\frac{3}{4}$  magnesium oxide and ginger) .2 gms. (30 grs.)  
**Sig.** Taken mixed in water after meals or at bedtime.

**CONVULSIONS** in children. See also Uremia. Exciting causes usually involved are teething, gastro-intestinal disturbance, worms, constipation, rickets, onset of acute disease, uterine cramps, brain lesions, meningitis, infection of spinal cord.

Drugs are sometimes effective especially the so-called irritant bromides combination.





- R. Potassii bromidi . . . . . 1 gm. (15 grs.)  
 Sodii bromidi . . . . . 1 gm. (15 grs.)  
 Ammonii bromidi . . . . . 1 gm. (15 grs.)  
 Syrupi aurantii  
 Aquæ or simple elixir . . . . . aa.  
 M. F. p. r. n. according to age and circumstances.

The *Anesthetics*, chloroform particularly, are effective in controlling attacks but they must be used very cautiously.

*Chloral* is sometimes added to bromides to further depress the central nervous system and control convulsions:

- R. Potassii bromidi . . . . . grs. 15  
 Chlorali hydrati . . . . . grs. 8  
 Syrupi aurantii  
 Aquæ  
 M. F. Sig., p. r. n. according to age and circumstance.

**CORNEA** Inflammation of (Keratitis). Treatment usually referred to ophthalmologist. The pain and photophobia are often treated by instillations of atropine sol. 1%. Syphilis is often an etiological factor and of course requires special treatment.

**CORNS.** Prophylaxis, which consists principally in wearing well fitting shoes, is of first importance.

Substances which dissolve the horny layer of the skin are used, such as Salicylic Acid:

- R. Acidi salicylici . . . . . 20%  
 Alcohol . . . . . 20%  
 Ether . . . . . 20%  
 Collodion . . . . . q. s. *ad* 100%  
 Paint on corn three times a day for a week, then soak in hot water.

**CORYZA** See Catarrh.

**COUGH.** Treat any cause of reflex irritation as from ear, pharynx, larynx, trachea, bronchi, lungs, pleura, heart, stomach, etc. In paroxysmal cough in children, think of whooping cough.

See also Asthma, Bronchitis, Influenza, Tuberculosis. To check cough the sovereign drug is *Opium* (morphine, codeine, heroin, etc.). The action of opium in cough is frequently spoken of as being exerted through the respiratory centre but while this is a part of its action the most important effect is a depression of some part of the sensorium with consequent removal of irritative reflexes.

R̄. Codeinae sulphatis . . . . . grs. 1/2  
 Syrupi scillae . . . . . m. xxx  
 Elixir and syrupi acidi citrici . . . . . aa.  
 Sig. Take in a little water, p. r. n.

R̄. Diacetylmorphinae hydrochloridi (heroin) .003  
 (gr. 1/20)  
 Sig. In watery solution or by hypodermic injection.

This substance is more toxic than codein and apparently more so than morphine. The hydrochloride is used because it is soluble.

*Opium* + some *Expectorant* constitutes a combination frequently used for cough. The student should practice a few simple combinations. Dover's Powder is a ready made example. So also is the famous Brown Mixture.

R̄. Pulveris ipecacuanhae et opii . . . . . 5 gm. (8 grs.)  
 (1 pt. opium, 1 pt. ipecae, 8 pts. milk sugar)  
 Sig. Given in powder or capsule particularly at bedtime.

R̄. Misturae glycyrrhizae compositae 10 mls. (3 iiss)  
 (About 10% paregoric.)  
 Sig. Taken diluted p. r. n.





℞. Tincturae opii camphoratae\* (.4% opium) 4  
mils. (3i)  
Syrupi scillae . . . . . 2 mils. (30 minims)  
Syrupi tolutani  
Syrupi acidi citrici . . . . . aa  
Sig. Taken diluted p. r. n.

℞. Tincturae opii . . . . . 5 mil. (8 minims)  
Tincturae scillae . . . . . 1 mil. (15 minims)  
Syrupi pruni virginianae  
Elixiris simplicis . . . . . aa.  
Sig. Taken diluted p. r. n.

Other central nerve depressants besides opium are sometimes used in cough, for example the methane narcotics especially *Chloral*. The *Bromides* are also used. *Opium + Bromides* is a combination often used in cough.

℞. Codeinae . . . . . gr. 1/2  
Sodii bromidi . . . . . grs. xv  
Aquae cinnamomi . . . . . q. s.  
M. F. Sig. Take diluted every two or three hours. In this ℞ codein and not the sulphate should be used for pharmaceutical reasons.

Drugs of the *Atropine* series (belladonna-hyoscyamus) are sometimes added to cough mixtures to diminish secretion. As a matter of fact this is not often desired as free bronchial drainage is advantageous.

The group of emetic drugs are all *Expectorants* in small doses as *Squill* which is often added to cough mixtures and is often followed by satisfactory results. Squill belongs to the digitalis series and under conditions of heart weakness should an expectorant be needed squill serves a double purpose.

℞. Tincturae scillae . . . . . 1 mil. (15 minims)  
In flavored solution or elixir p. r. n.

\*One tablespoonful of paregoric contains one grain of opium.



- R̄. Syrupi scillae . . . . . 2 mls. (30 minims)  
In flavored solution or merely diluted.
- R̄. Syrupi scillae compositi (contains Tartar Emetic,  
Senega and Squill) 2 mls. (30 minims)  
In water.

*Ipecac* is valuable as an expectorant for cough and is often used.

- R̄. Fluidextracti ipecacuanhae .05 mil. (1 minim)  
expectorant  
In flavored solution or elixir.
- R̄. Syrupi ipecacuanhae 1 mil. (15 minims) expecto-  
rant  
In water or elixir.
- R̄. Tincturae ipecacuanhae et opii (10% opium  
and ipecac) N. F. .5 mls. (8 minims)  
In water or elixir.
- R̄. Pulveris ipecacuanhae et opii (10% ipecac and  
opium) .5 gms. (8 grs.)  
In powder or capsule.

*Senega* is prescribed in expectorant mixtures.

- R̄. Fluidextracti senegae. . . . . 1 mil. (15 minims)  
In water or elixir.
- R̄. Syrupi senegae. . . . . 4 mls. (3i)  
In water or elixir.

*Apomorphine hydrochloride* belongs to the class of expectorants when given in small doses. It is sometimes used, therefore, for cough.

- R̄. Apomorphinae hydrochloridi  
In flavored solution.  
Average expectorant dose .003 gm (1/20 gr.)\*

\*Average emetic dose U. S. P. IX by mouth .01 gm. (1/6 gr.) by hypo .005 gm. (1/12 gr.).





The *Iodides* are prescribed in expectorant mixtures to render the bronchial mucous more watery and less tenacious. The action is a salt action and pertains to all neutral salts of the alkalies which are not broken up in the tissues—they increase the secretion of water and also of alkaline carbonates upon the mucous membrane of the respiratory passages. The action is not very strong however.

R̄. Potassii or sodii iodidi. . . . . .3 gm. (gr. 5)  
In watery solution

The iodides are usually prescribed alone but they can be incorporated into any order of cough mixture provided alkalies are not present.

*Benzpic Acid* and *Terpene Hydrate* are used empirically as ingredients in cough mixtures, particularly for chronic bronchitic coughs. The former is usually prescribed as benzoïn or tolu preparation. Syrup of tolu is principally a flavor being too weak to have much other action. Benzoates and Terpene hydrate are supposed to be most beneficial when mucous is tenacious and coughed up with difficulty.

R̄. Acidi benzoici . . . . . .5 gm. (8 grains)  
In powder, pill or alkaline sol.

R̄. Tincturae benzoini compositae 2 mls. (30 minims)  
In elixir.

R̄. Tincturae tolutani . . . . .2 mls. (30 minims)  
In elixir.

R̄. Syrupi tolutani. . . . .15 mls. (3iv)  
In flavored water or elixir.

Terpine hydrate is quite popular as an ingredient of cough mixtures. It is always combined with opium to

which latter drug most of the effects may be ascribed. Terpene requires alcohol to dissolve it.

R. Terpini hydratis.....grs. iv (.25 gm.)  
 Codeinae sulphatis.....grs. 1/2  
 Glycerinae.....3i  
 Alcoholis.....q. s.  
 Elixiris simplicis.....q. s. *ad* 3i  
 M. F. Sig. 3i in water, p. r. n.

The Benzoates are sometimes combined with iodides and chlorides in chronic cough particularly in Emphysema and Asthma:

R. Potassii iodidi.....grs. 5  
 Ammonii chloridi.....gr. 5  
 Syrupi tolutani  
 Elixiris aurantii  
 Aquae.....aa.  
 M. F. Taken diluted, p. r. n.

*Note:*—Ammonium chloride and ammonium carbonate are often added to expectorant mixtures. As ammonium salts are decomposed in the tissues forming urea, etc., it is difficult to see how they can act effectively. Some pharmacologists state that minute quantities of ammonium carbonate may be found in the bronchial mucous membrane and thus dissolve the mucous and stimulate ciliary movements. The question may be considered undecided; the action if any must be slight.

Gelsemium has had a long vogue as a remedy for cough to which it is apparently not entitled. The same may be said of grindelia, lactucarium, drosera and a long list too numerous to mention. The tendency of present day rational therapeutics is to drop useless or superfluous drugs.

**CRAMPS.** If recurrent examine urine for albumin or sugar.

If severe, opium may be necessary. (See Pain.)





**CRETINISM** (sporadic). *Thyroid* extract is beneficial.

**R<sub>x</sub>. Thyroidei Sicci . . . . . 1gm. (1 1/2 grs.)**  
 Given in tablet, powder or capsule. The dose  
 of thyroid extract should always be begun  
 small (even fractional grain) and gradually  
 increased.

**CROUP.** So-called membranous croup is diphtheria (q. v.).

**Spasmodic croup is often associated with rickets (q. v.).**

The symptom is treated by various methods; central nervous depressants particularly *Bromides* and *Chloral* are occasionally used.

**R<sub>x</sub>. Potassii bromidi . . . . . 1 gm. (15 grs.) •**  
**In flavored solution or syrup.**

[illegible]

**Doses of course should correspond with age.\***

Inhalations of steam containing various aromatic and antiseptic substances may be useful. Convenient small apparatus for spraying steam are readily obtainable. *Compound Tincture of Benzoin* may be added. Substances belonging to the phenol series such as creolin should be avoided.

**CYANOSIS.** Treat the cause which may be various; pulmonary, cardiac or haemic. Inhalations of *Oxygen* under pressure are often of value in conditions of cyanosis when due to severe cardiac or pulmonary disease. The oxygen content in the blood plasma rises from .6 to 3%. Diffusion of oxygen into the pulmonary alveoli is also more rapid when pure oxygen is breathed.

**\*Formula =  $\frac{\text{Age}}{\text{Age} + 12}$**



**CYSTITIS.** Rest in bed, abundant fluid; treat the cause, gonorrhoea, stricture, prostatitis, calculus, gout. Examine for residual urine. Cystoscopic examination may be necessary.

*Hexamethylenetetramine* is efficacious as a urinary anti-septic (alkaline urine, phosphaturia).

- R̄. Hexamethylenaminae. . . . . .25 gm. (4 grs.)  
In tablet, powder, or solution, always followed by water.

*Benzoic Acid* is used internally. This substance is converted by the kidneys into hippuric acid which increases urinary acidity. Benzoic acid has been displaced largely of late years by Hexamethylenetetramine.

- R̄. Acidi benzoici . . . . . .5 gm. (8 grains)  
In powder, capsule, pill or solution in oil, alcohol or alkaline solution.

- R̄. Sodii benzoatis. . . . . .1 gm. (15 grs.)  
In flavored watery solution or capsule.

*Belladonna* (Atropine) is used to diminish bladder movements. Atropine paralyzes the motor terminations of the vagus (receptors in myoneural junction) thereby inhibiting contractions of unstriated muscle.

- R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
In pill, solution or by hypodermic injection.

- R̄. Extracti belladonnae foliorum .015 gm. (1/4 gr.)  
In pill.

- R̄. Tincturae belladonnae foliorum .75 mil. (12 minims).  
In watery solutions.

- R̄. Fluidextracti belladonnae radis .05 mil. (1 minim)  
In water.





*Opium* is also used to relieve the pain of cystitis when severe. This it does by an action on the cerebrum and not on the bladder. (For preparations of *Opium* see under *Pain*.)

The genito-urinary-antiseptic volatile oils are used in the sub-acute stage. *Santol*, *Copaiba*, *Cubebæ*—also *Buchu*, *Uva Ursi*.

R̄. Olei santali . . . . . .5 mil. (8 minims)  
In flavored acacia emulsion or capsule.

R̄. Copaibae . . . . . .1 mil. (15 minims)  
In flavored acacia emulsion or capsule.

R̄. Oleoresinae cubebae. . . . . .5 gm. (8 grs.)  
In pill or capsule.

In excessive acidity the *Hydrates* and *Carbonates* of the *Alkalies* are used. (See also *Hyperacidity of Urine* for detail.)

R̄. Liquoris potassii or sodii hydroxidi (5%) 1 mil.  
(15 minims) well diluted.

R̄. Potassii carbonatis . . . . .1 gm. (15 grs.)  
or  
Sodii carbonatis monohydrati . . .25 gm. (4 grs.)  
Well diluted.

R̄. Potassii or sodii bicarbonatis. . .1 gm. (15 grs.)  
Well diluted.

Combinations of above drugs may be used, as *Belladonna* + *Opium* + *Hexamethylenetetramine* (or + *Alkali* if indicated).

R̄. Fluidextracti belladonnae radices . . . . .m. i  
Tincturae opii . . . . .m. viii  
Hexamethylenaminae (if urine is alkaline) grs. iv  
Liquor potassii hydroxidi (if urine is acid) m. xv  
Olei volatilis (gaultheria) for flavor . . . . .q. s.  
Aquae  
M. F. Sig., p. r. n., well diluted.

- R̄. Potassii acetatis . . . . . grs. xv  
 Liquoris potassii hydroxidi . . . . . m. xv  
 Fluidextracti uvae ursi . . . . . m. xxx  
 Tincturae hyoscyami . . . . . m. xxx  
 Syrup aurantii  
 Aquae . . . . . aa.  
 M. F. Sig., p. r. n., well diluted.

Potassium acetate becomes converted into carbonate in the blood. This is true of all acetates. The alkalinity of the blood is thus increased and the acidity of the urine diminished *pari passu*.

Local treatment of inflamed bladder is often undertaken in cystitis. Methods employed include antiseptic and astringent (organism destroying and proteid precipitating) drugs particularly. 'Silver nitrate is a favorite drug for this purpose. It may be used in limited amount, *i. e.* instillations in 1/4-1/2% or by irrigation in extreme dilution (1-10,000).

**DANDRUFF.** See Pityriasis.

**DEAFNESS.** Treatment special and altogether based upon etiology and pathology. No pharmacological treatment unless it be *Strychnine* in certain forms of nerve deafness. The action is doubtful.

- R̄. Strychninae sulphatis or nitratis .0015 gm.  
 (1/40 gr.)  
 In pill, solution, or by hypodermic injection.
- R̄. Extracti nucis vomicae . . . . . .015 gm. (1/4 gr.)  
 In pill.
- R̄. Tincturae nucis vomicae. . . .5 mil. (8 minims)  
 In solution with elixir.

**DEBILITY.** (Without obvious cause.) See also Anemia, Anorexia, Neurasthenia, Impotence, Addison's Disease.

*Alcohol* preparations are sometimes indicated as whiskey, brandy, wines and beers.





*Aromatic Spirits of Ammonia* and *Carbonate of Ammonia* in solution are used as mild gastric stimulants. They are ephemeral in their action.

*Strychnine* as a cord stimulant (tonic) and bitter is much used, alone or combined.

**R<sub>x</sub>. Elixir ferri quininae et strychninae N. F. ("F. Q. & S.") 4 mls. (3i)**  
**Well diluted with water.**

**DELIRIUM.** May be due to fever, q. v. Cold baths and sponging are effective. When delirium is accompanied by fever, antipyretics of the *Acetanilid*, *Antipyrin*, *Phenacetin* series are sometimes effective.

[illegible]



- R̄. Acetphenetidini (phenacetini) . . .3 gm. (5 grs.)  
Prescribed as acetanilid. (v. s.)

Central nerve depressants particularly *Bromides* and *Chloral* are sometimes necessary.

- R̄. Potassii or sodii bromidi . . . . . 1 gm. (15 grs.)  
In flavored watery solution, p. r. n.

- R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
In syrup, flavored solution or elixir.

**DELIRIUM TREMENS.** (See also Alcoholism.) Light diet followed soon by progressively increasing nutrition is important. Sufficient alcohol must be given and gradually reduced.

Central nerve depressants are used particularly those of the methane series as *Chloral* and *Bromides*, alone or combined.

- R̄. Potassii bromidi . . . . . 1 gm. (15 grs.)  
In flavored water or aromatic elixir.

- R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
In flavored water or aromatic elixir.

Central nerve depressants of alkaloid series may be necessary occasionally as *Opium* and *Hyoscine*.

- R̄. Opii pulveris deodorati or granulati, .06 gm  
(1 gr.)  
In pill or powder.

- R̄. Extracti opii . . . . . .03 gm. (1/2 gr.)  
In pill.

- R̄. Tincturae opii or T. o. deodorati, .5 mil.  
(8 minims)  
In flavored solution or elixir.

- R̄. Tincturae opii camphoratae . . . . . 4 mils. (3i)  
In water or elixir.





- R̄. Morphinae sulphatis or hydrochloridi .008 gm.  
(1/8 gr.)  
In tablet or by hypodermic injection.

All the above drugs may be combined, as *Bromides + Chloral + Opium*.\*

- R̄. Tincturae opii, . . . . .m. viii  
Potassii bromidi . . . . .gr. xv  
Chlorali hydrati . . . . .grs. viii  
Syrupi zingiberis . . . . .1/3  
Elixiris aurantii . . . . .2/3  
M. F. Sig. 3i-3ii. In water, p. r. n.

### DIABETES INSIPIDUS. Try Wasserman.

The antipyretic series, *Acetanilid*, *Antipyrin*, *Phenacetin* are used empirically. The results are disputed.

- R̄. Acetanilidi. . . . . .2 gm. (3 grs.)  
In powder mixture (mucilage), capsule or tablet.
- R̄. Antipyrinae . . . . . .3 gm. (5 grs.)  
In flavored watery solution.
- R̄. Acetphenetidini (phenacetin). . . .3 gm. (5 grs.)  
Prescribed like acetanilid.

There is no rational pharmacological treatment for this condition since its pathogeny is unknown. Many drugs have been used empirically particularly opium, valerian, ergot, salicylates, arsenic, suprarenal extract, etc., but none of them are at all reliable. Valerian is absolutely without value except from a suggestive point of view due to its odor. If it is desired to use opium for trial see Pain for preparations. If arsenic see under Anemia, if salicylates, see under Rheumatism.

\*The invariable rule is that when two or more potent drugs whose action is synergistic are combined in one prescription the individual doses should be proportionately or even more than proportionately reduced.

**DIABETES MELLITUS.** Treatment of the disease is at present principally dietetic. The Allen starvation treatment is effective in removing sugar. It is still on trial. Many drugs have been tried; most of them are useless. Opium lessens glycosuria by an unknown mechanism. Codein is generally employed to obtain this effect.

R. Codeinae sulphatis. . . . . .03 gm. (1/2 gr.)  
In pill, powder or capsule.

For other opium preparations, see under Pain, also under Diarrhoea.

When opium is given in diabetes it is usually combined with a purgative to overcome the paretic effect in the bowel movements.

R. Pulveris opii. . . . . .gr. i  
Extracti cascarae sagradae. . . . . .gr. iv  
Excipientis. . . . . .q. s.  
Ft. pill, one t. i. d.

R. Codeinae phosphatis. . . . . .gr. 1/2  
Extracti cascarae sagradae. . . . . .gr. iv  
Excipientis. . . . . .q. s.  
Ft. pill. Sig., t. i. d.

The *Antipyretic* series (Acetanilid, Antipyrin, Phenacetin) are often used and appear in some cases to reduce the sugar output. Their depressing effects prevent their use in most cases.

For preparations and doses v. s., under Diabetes Insipidus.

The *Alkalies* are of value in neutralizing oxybutyric acid when formed, thus economizing the alkalies of the blood. All diabetics with a marked diacetic acid reaction in the urine should be placed on sodium bicarbonate internally or by rectum. Particularly in coma or threatened coma have the alkalies been considered of value.





R. Sodii bicarbonatis

Give 1-2 pints of 3% solution by mouth or subcutaneously and even intravenously. Of late, warnings have been raised against too large doses.

Saccharin or benzosulphinidum is used as a substitute for sugar in the food of diabetics. It is 500 times as sweet as sugar but has a peculiar and to some persons an objectionable taste.

*Note:*—The treatment of diabetes with hormones from the pancreas has failed. The vaunted salts of uranium and vanadium are without effect. The same may be said of salicylates and atropine.

Empirically, cultures of lactic acid bacillus have been used; also hexamethylenamine; results sub judice.

Methylene blue, lithium, and many other drugs have had their vogue in the treatment of diabetes mellitus but have all been found wanting in any real efficiency. The treatment a la mode at the present time is the Allen treatment which seems very effective in removing glycosuria. It is entirely dietetic however and cannot be considered here. Much time and experience will be required before its real status may be known.

**DIARRHOEA.** See also Dysentery, Entero-colitis, Mucous colitis.

May be due to stricture, fecal impaction, carcinoma, rectal infection and ulceration, reflex causes (chill, anxiety, Graves' disease). Excess in eating, nephritis, infectious diseases as typhoid, etc. Indications for treatment are removal of irritants in the bowel, limitation of peristalsis and general prophylaxis.

*Opium* is effective in lessening peristalsis and allaying pain and restlessness.

R. Opii pulveris, deodorati or granulati .06 gm.  
(1 gr.)

Pill, powder or capsule.



- ℞. Extracti opii. . . . . .03 gm. (1/2 gr.)  
Pill, powder or capsule.
- ℞. Tincturae opii or T. o. deodorati, .5 mil .(8  
minims)  
In flavored solution.
- ℞. Tincturae opii camphoratae (4-1000 opium),  
Average dose, 4 mils. (3i) adult; .3-1 c. c. 5-15  
m. for child.  
In water, flavored water or elixir.
- ℞. Morphinae hydrochloridi or sulphatis .008 gm.  
(1/8 gr.)  
Tablet, capsule or powder.

*Bismuth* is effective in diarrhoea, through its mechanical and absorptive properties. *Chalk* is used for the same purposes.

- ℞. Bismuthi subnitratis . . . . . .5 gm. (8 grs.)  
In powder or suspension in water or mixture  
with mucilage of tragacanth.
- ℞. Bismuthi subcarbonatis\*. . . . . .5 gm. (8 grs.)  
As above.
- ℞. Bismuthi subnitratis . . . . . .8 grs.  
Mucilaginis tragacanthi . . . . . 1/3 d.  
Aquæ cinnamomi . . . . . 2/3  
M. F. Suspension. Shake and take in 3ii  
dose, p. r. n.
- ℞. Cretae preparatae . . . . . .grs. xv  
In powder, capsule or suspension.

\*Subgallate and subsalicylate of bismuth are also official. Average dose same.





- ℞. Cretae preparatae . . . . . grs. xv  
 Pulveris acaciae . . . . . q. s.  
 Pulveris sacchari . . . . . q. s.  
 Aquæ cinnamomi  
 Aquæ . . . . . aa.  
 Take p. r. n. This is the *Mistura Cretae Composita* of the U. S. P.

*Opium* + *Bismuth* may be used in combination and is a frequent prescription of drugs for diarrhoea. Also *Opium* + *Bismuth* + *Chalk*.

- ℞. Bismuthi subcarbonatis . . . . . gr. viii  
 Tincturae opii deodorati . . . . . m. viii  
 Misturae cretae . . . . . ℥i  
 Shake well and take p. r. n.
- ℞. Opii pulveris . . . . . gr. i  
 Bismuthi subnitratis . . . . . grs. viii  
 M. F. powder, as necessary.
- ℞. Tincturae opii camphoratae . . . . . ℥i  
 Bismuthi subnitratis . . . . . grs. viii  
 Aquæ menthae piperitae . . . . . q. s.  
 Sig. Shake the mixture very well to distribute the bismuth, p. r. n.

In certain forms of diarrhoea the astringent action of *Tannic Acid* is of considerable value, and occasionally when such drugs as cod-liver oil cause diarrhoea, tannic acid prevents this action without hindering their general effects. The pure drug is less effective than many crude drug preparations containing colloids which delay action of the tannin until the intestine is reached, as *Krameria*, *Tannalbin*, *Gambir* and *Kino*.

- ℞. Extracti krameriae N. F. . . . . grs. viii  
 In pill.
- ℞. Acidi tannici\* . . . . . grs. viii  
 In powder or capsule.

\*Unofficial tannates as tannalbin are sometimes used.

- R̄. Tincturae gambir compositae. . . 4 mils. (3i)  
In flavored water or elixir.
- R̄. Tincturae kino. . . . . 4 mils. (3i)  
In flavored water or elixir.
- R̄. Pulveris kino et opii compositi N. F. (5% opium)  
1 gm. (15 grs.)  
In powder or capsule.

Combinations of *Opium* + *Bismuth* + *Tannin* are very effective and are frequently employed in checking persistent diarrhoea.

- R̄. Tincturae opii camphoratae. . . . . 3i  
Bismuthi subnitratis. . . . . grs. viii  
Tincturae kino. . . . . 3i  
Aquæ menthae piperitae. . . . . q. s.  
M. F. Shake well before taking.

A limited number of original combinations may be improvised by the student. There is no advantage however in multiplying these. Try one using *Opium* + *Bismuth* + *Chalk* + *Krameria*.

*Alum* (potassium aluminium sulphate) is sometimes given. It acts by precipitating proteids and acting as an astringent.

- R̄. Aluminis . . . . . .5 gm. (grs. viii)  
Watery solution, well diluted or in pill.

*Lead Acetate* is occasionally prescribed internally, generally along with opium. Lead should be applied for only a short time either internally or externally on account of the danger of poisoning.

- R̄. Plumbi acetatis. . . . . .06 gm. (1 gr.)  
In pill.





R̄. Pilulae opii et plumbi N. F. (1 gr. each of lead and opium powder.)

Large enemata containing tannic acid are used; 1% or 2% strength.

*Hydrochloric Acid* is indicated when the diarrhoea is due to excessive putrefaction of intestinal contents. It acts by disinfecting the stomach contents.

R̄. Acidi hydrochlorici diluti (10% c. c.) 1 mil.  
(15 minims)  
Always well diluted.

In diarrhoea, especially in children, *Lime Water* is effective.

R̄. Liquoris calcis [.14% Ca. (OH<sub>2</sub>)] 15 mls (3iv)

Cultures of *Lactic Acid Bacillus* have been found to be effective in certain cases, particularly the gastro-enteritides or summer diarrhoeas of children. This treatment is still on trial.

R̄. Tablet bacilli acidi lactici\*  
Crush in water and give after each stool or several times daily.

The *Magnesia preparations* may be used also in diarrhoea as antacids, as they have no irritant action on the bowel. The oxides and carbonates of magnesia are insoluble in water. An alkaline and laxative effect is simultaneously produced.

R̄. Magnesii oxidi ponderosi . . . . . 2 gms. (30 grs.)  
In powder or mixture.

R̄. Magnesii carbonatis . . . . . 3 gms. (45 grs.)  
In powder or mixture.

\*Unofficial.



R. *Magmae magnesia* [milk of magnesia 6.5%, magnesium hydroxide  $\text{Mg}(\text{OH})_2$ ], 10 mils.  
(*℥iiss*)  
Alone or variously combined.

When diarrhoea is brought about by irritants in the bowel *Purgatives* are often given, especially Castor Oil, Senna, Rhubarb and Salines. For preparations and doses see under Constipation.

*Brandy* has a considerable reputation in the treatment of mild forms of diarrhoea.

**DIPHTHERIA.** The treatment is sometimes surgical as in laryngeal forms which may require intubation. The pharmacological treatment of this disease is purely secondary—the only effective treatment is the aetiotropic one of the serum, which must be used as early as possible and in sufficient doses as:

*Serum Antidiphtheriticum*—average dose 10,000 units U. S. P. IX. Many authorities employ even higher doses. The injections should be repeated if necessary. As a prophylactic dose 1000 or more units should be used. Average prophylactic dose U. S. P. IX, 1000 units. The tendency at the present time is to use larger doses than formerly and to employ the serum as early as possible.

Lime water has been sprayed against the false membranes which it is said to dissolve.

R. *Liquoris calcis* . . . . . [.14%  $\text{Ca}(\text{OH})_2$ ]  
Use in atomizer or steam spray.

Silver nitrate is used to destroy the false membrane. The pure caustic is used. (*Argenti nitras fusus*.)

If paralysis occurs, rest, tube feeding occasionally, and later strychnine and electricity are indicated. Antidiphtheritic serum is often employed in large doses.

**DISLOCATION.** Treatment surgical. Pain (q. v.) may require relief.





**DISTOMIASIS.** Flukes. No effective treatment. Prophylaxis is important. Symptoms, Cystitis, Proctitis and Hematuria, may require attention.

**DROPSY.** The cause must be treated, cardiac renal, hepatic, etc. See Heart Disease, Nephritis and Cirrhosis, Biliary.

Purgatives are often useful for their depletive effects.

The saline cathartics are often used but are contraindicated in asthenic conditions. Vegetable cathartics and mercurial cathartics are employed similarly. Calomel and other mercurials are of value especially in cardiac dropsy; and to a lesser extent in hepatic and renal forms. (A list of the most extensively used cathartics may be found under constipation.)

Combinations of cathartics are frequently employed, among the best being a combination of:

*Saline + Vegetable* (especially resin) *Purge*:

R<sub>x</sub>. Pulveris jalapae compositae (jalap 1/3 d + potassium bitartrate 2/3 ds.)

Powder p. r. n. to produce watery catharsis.

or *Saline + Vegetable Purge + Mercury*.

R<sub>x</sub>. Pulveris jalapae compositae . . . . .grs. xxx  
Hydrargyri chloridi mitis . . . . .grs. iiss  
M. F. powder, p. r. n.

In dropsy due to renal disease *Pilocarpine* reduces the fluid through sweating and removes the effects of accumulation. (See also Uremia.) Weak heart or pulmonary oedema are contraindications, the drug tending to exaggerate both these conditions.

R<sub>x</sub>. Pilocarpinae hydrochloridi or nitratis  
Average dose by mouth .01 gm. (1/6 gr.);  
hypodermic .005 gm. (1/12 gr.).

The hydrochloride is very soluble in water.

- R̄. Pilocarpinae hydrochloridi . . . . . gr. 1/6  
 Aquae cinnamomi . . . . . 3i  
 M. F. Sig. Once or twice daily or p. r. n.  
 until effect is produced. Contraindicated in  
 pulmonary oedema and severe heart failure.

*Digitalis* and *Squill* are often prescribed together for the removal of large accumulations of fluids particularly in heart disease. Their actions tend to be synergistic.

- R̄. Tincturae digitalis . . . . . .5 mil. (8 minims)  
 Tincturae scillae . . . . . 1 mil. (15 minims)  
 Well diluted p. r. n.

A much used combination particularly in cardiac dropsy is *Addison's* or *Niemeyer's* pill which contains powdered digitalis, squill and calomel of each .06 (1 gr.). In many instances it is well to use less calomel .03 (1/2 gr.).

- R̄. Digitalis pulveris . . . . . gr. i  
 Scillae pulveris . . . . . gr. i  
 Hydrargyri chloridi mitis . . . . . gr. i  
 In pill or capsule, repeat p. r. n.

Look out for mercury or digitalis intolerance (sore gums, salivation, slow pulse, coupled rythm). Calomel must be given in smaller dose, if repeated. This combination of digitalis, squill and calomel is well known under the name of Addison's pill and is extremely effective as a diuretic in cardio-renal disease.

*Caffeine*, *Theobromine* and *Theocin* are effective in removing accumulated fluids whether of cardiac, renal or hepatic origin. The results are good even in cardiac dropsy if the heart failure is not too great. In renal dropsy the results depend on the state of the kidney. In hepatic dropsy they are of palliative service. Theobromine is often preferred to caffeine because it acts less on the heart and central nervous system producing less irritability; it is more irritating to the stomach, however.





- R̄. Caffeinae . . . . .15 gm. (grs. 2 1/2)  
In powder, tablet or dissolved in water by means  
of sodium salicylate or benzoate. equal parts.
- R̄. Theobrominae sodio-salicylatis (diuretin) 1 gm.  
(15 grs.)  
In powder, capsules or solution, p. r. n.
- R̄. Theophyllinae (theocin) . . . . .25 gm. (grs. iv)  
In capsule, p. r. n.

It will be seen that the most effective drugs for the relief of the symptom dropsy are the Saline Purgatives, Mercury, Pilocarpine, Digitalis, Squill, Caffeine, Theobromine and Theocine. In renal forms of dropsy the indications are Salines carefully, Mercury, Pilocarpine, Theobromine and Caffeine. In cardiac forms the specially indicated drugs are Digitalis, Squills and Salines. Inasmuch as cardio-renal forms of dropsy exist in which both heart and kidney lesions are productive factors, it is rational to make various combinations of these drugs. Some of the most frequent combinations have been given above. The student may improvise others, keeping the indications in mind and avoiding polypharmacy. One combination rather frequently employed is:

*Vegetable Purgatives + Digitalis + Squill* for cardiac forms. The following is an example.

- R̄. Elaterini . . . . .003 gm. (gr. 1/20)  
Tincturae digitalis . . . . .m. viii  
Tincturae scillae . . . . .m. xv  
Syrupi aurantii.  
Aquae . . . . .aa. q. s.  
M. F. Sig. Give dose say, 3i three or four  
times daily or p. r. n. until effect is produced.

**DYSENTERY.** Amebic. A tropical disease. Sporadic cases occur in this country; mild, acute and chronic forms are known. Prophylaxis as for typhoid. Rest and liquid diet essential. Tenesmus and pain require treatment.



Colostomy has been performed, also appendicostomy in inveterate cases.

*Ipecac* is by some regarded as almost a specific for tropical dysentery. Recent investigations have tended to show that the effect is due to the alkaloid emetine contained in the ipecac.

R̄. *Ipecacuanhae* . . . . . 1 gm. (grs. 15)  
Repeated p. r. n. with patient at rest. Opium, ice and sinapism may be required to check vomiting produced by the drug.

The alkaloid *Emetinae Hydrochloridum* has recently been found more effective than the crude drug. It is given hypodermically t. i. d., .02 gm. (gr. 1/3) gradually increased if necessary. This treatment is now universally employed and Emetine is regarded as specially amoebicidal.

Even pyorrhoea alveolaris, in which certain amoebic forms have been found has been treated by hypodermic injections and local applications of Emetine. Enthusiasm has gone so far as to bring Emetine into prominence in the treatment of various arthritides supposed to be secondary to dental foci of amoebic infection. The claims appear to be extravagant.

*Saline Cathartics* are useful in the early stages of the disease particularly the bacillary forms.

R̄. *Magnesii sulphatis* . . . . . 15 gms. (3iv)  
In powder or effervescent powder, dissolved in water.

R̄. *Sodii sulphatis* . . . . . 15 gms. (3iv)  
In powder, or effervescent powder, dissolved in water.

In making effervescent powders add equal parts of saccharated sodium bicarbonate and saccharated tartaric acid to the selected dose.

Locally large *Enemata* have been advised; these may contain tannic acid 1%, alum 1%, copper sulphate 1%, silver nitrate 1/4–1/2%, zinc sulphate 1%, but particular-





**Note:—**Intestinal antiseptics formerly popular are not much used at the present time. Bismuth is harmful.

No specific pharmacological treatment exists. Anemia (q. v.) should be treated if present.

Analgesics of the *Acetanilid, Phenacetin, Antipyrin* group appear to be often effective in assuaging pain.

**R.** Acetanilidi . . . . . gr. iii  
Chloroformi . . . . . m. v  
Alcoholis . . . . . 3i

**R.** Antipyrini.....gr. v  
Sodii salicylatis.....gr. xv  
Extracti opii.....gr. 1/2  
Aquæ  
Syrupi aurantii.....aa.  
Sig. Every 2 hours or more if needed.

**\*The methane narcotics include Alcohol, Anesthetics and Chloral.**

*Note:*—Viburnum, sumbul, apiol, guaiac, cramp bark, stargrass, black haw, wild yam, helonias and a host of other similar drugs mentioned in formularies are useless.

**DYSPEPSIA.** Indigestion. See also Hyperacidity, Hypoacidity, Gastralgia, Anorexia, Vomiting, etc.

Dyspepsia is, of course, a rather insufficient term. It expresses very well, however, the simple fact of disordered digestion. The diagnosis and general treatment of gastrointestinal diseases cannot be entered upon here. Pharmacologic is often secondary to hygienic and dietetic treatment.

One important thing to remember about dyspepsia is that it is often secondary to diseases of diverse organs as the heart, nervous system, kidney, gall bladder, appendix, etc.

Acute Dyspepsia. Carbonated waters, ice, counter irritation (mustard). Emetics, one or all may be useful under certain circumstances.

*Cathartics* are much used to remove offending material followed or combined with central nerve depressants for pain. Such a combination is *Oleum Ricini* and *Opium*.

R̄. Olei ricini . . . . . 15 mls. (3iv)  
In emulsion with sugar, acacia and volatile oil  
or in wine, spirits, glycerin, peppermint water,  
soda water or flexible capsule.

R̄. Tincturae opii . . . . . .5 mil. (8 minims)  
This is added to any selected mixture containing  
the castor oil.

Perhaps as simple a method as any is as follows:

R̄. Olei ricini . . . . . 3iv  
Tincturae opii . . . . . m. viii  
Aquæ cinnamomi . . . . . q. s. (say q. s. 3ii)  
Shake well until the oil is well and finely distributed and take.





**Chronic Dyspepsia.** See also Gastric Catarrh, Hyperacidity. All cases of chronic dyspepsia require a careful examination of the gastric function, chemical, motor, etc.

The *Bitters* are used to increase appetite and digestion especially *Gentian*, *Calumba*, *Quassia*, *Chirata*. For preparations see under *Anorexia*.

The drinking of large quantities of water or weak salt solution may be beneficial. The action is due to mild irritation of the gastric mucosa with swelling of the epithelial cells and increased movement of the fluid. The effect of treatment at watering places is partly due to this and partly to other circumstances as dietetic regimen, rest, etc.

*Note:*—The digestive ferments, Pepsin, Pancreatin and Diatase have been extensively used in dyspepsias but as these ferments are never absent altogether from the intestinal tract it is exceedingly doubtful if they are ever truly indicated. Empirically, however, they continue to be much used.

**DYSPNOEA.** A symptom found in a variety of diseases, renal, cardiac and pulmonary, etc.

See also Asthma, Emphysema, Nephritis, Heart Failure.

In heart disease with high peripheral tension *Amyl Nitrite* is effective. (See heart failure.)

*Opium* is very effective in the dyspnoea of heart disease—it is variously combined as with the *Iodides* when there is asthma; *Digitalis* when there is asystole. (See Heart—Diseases of.)

Dyspnoea when extremely severe may require a hypodermic of *Morphine* for its temporary relief, no matter what the cause. A combination of morphine gr. 1/8–1/4, atropine gr. 1/120 and nitroglycerine gr. 1/100, is sometimes extremely effective.

**DYSURIA.** See also Cystitis, Hyperacidity of Urine, Calculus. A cystoscopic examination for stone, etc., should be made.

The *Alkaline Carbonates* are useful if the urine is hyperacid.



R̄. Potassii bicarbonatis . . . . . 1 gm. (15 grs.)  
In water, flavored or otherwise.

R̄. Sodii bicarbonatis. . . . . 1 gm. (15 grs.)  
In water, flavored or otherwise.

*Belladonna* (*Atropine*) is useful to diminish bladder contractions.

R̄. Atropinae sulphatis. . . . . .0005 gm. (1/120 gr.)  
In pill or tablet or solution.

R̄. Tincturae belladonnae foliorum .75 mil. (12 minims)  
In water:

R̄. Fluidextracti belladonnae radice .05 mil. (1 minim)  
In water.

Combinations of *Carbonates* + *Belladonna* may prove useful.

R̄. Potassii bicarbonatis . . . . . grs. xv  
Tincturae belladonnae foliorum . . . . m. xii  
Elixiris or aquae . . . . . q. s.  
M. F. Sig., t. i. d.

R̄. Potassii bicarbonatis . . . . . grs. xv  
Tincturae belladonnae foliorum . . . . m. xii  
or  
Tincturae hyoscyami . . . . . m. xxx  
Elixiris aurantii . . . . . q. s.  
M. F. Sig., p. r. n.

**EARACHE.** Cause should be ascertained. May be a symptom of otitis media, mastoiditis, etc. Ear, mouth, teeth, throat and nose should of course be examined. Certain infections as tonsillitis, influenza, etc., often





produce middle ear disease with pain. Paracentesis tympani is sometimes required.

There is no specific pharmacological treatment for earache.

*Salicylates* are often useful alone or in combination especially when earache is secondary to tonsillitis or grippe.

R̄. Sodii salicylatis . . . . . 1 gm. (15 grs.)  
In capsule, syrup or flavored watery solution.

R̄. Acidi diacetylsalicylici\* . . . . . 1 gm. (15 grs.)  
In capsule or acacia mixture.

R̄. Codeinae sulphatis, gr. 1/4, aver. dose gr. 1/2  
Acetphenetidini, gr. 1 1/2, aver. dose gr. v  
Aspirin . . . . . gr. iv, aver. dose gr. xv  
Cinchonidinae sulphatis, gr. i., aver. dose gr. 2-1/2  
Capsule. One q. 2 h. Doses are smaller than  
the average since the prescription is to be  
repeated.

Local treatment is often beneficial particularly hot fomentations, irrigations of meatus with hot saline solution and counterirritation behind the ear. The old idea of putting laudanum in the ear is founded on fallacy. If opium is needed it must be taken internally to do good. Warm olive oil may be beneficial or syringe the meatus with warm water with or without antiseptics. (Boric acid 4%, hydrogen peroxide 50%.)

Central nerve depressants may be required for the pain: *Opium* group, *Acetanilid* group. (For preparations see under Pain.)

*Hexamethylenamina* has been recently used extensively since the discovery by the author (1910) that the drug is eliminated by the mucous membranes of the middle ear. Opinions are divided as to the efficacy of the treatment. It seems rational however; perhaps the amount eliminated is too small to be effective.

\*Aspirin not official.

R̄. Hexamethylenaminae. . . . . .25 gm. (4 grs.)  
Tablet or solution, p. r. n.

Earache which persists generally requires the attention of the otologist.

**ECHINOCOCCUS.** Hydatid. Treatment surgical. Drugs have no effect.

**ECLAMPSIA** Puerperal. (See also Convulsions.)

Treatment chiefly surgical. The uterus must usually be emptied. Abbreviation of labor is always sought for. Even Caesarian section may be indicated in certain primiparae. Treatment by drugs is therefore secondary.

*Central Nerve Depressants* are used occasionally to control convulsions particularly the methane narcotics but they must be carefully used:

R̄. Ether  
Carefully used by inhalation to control convulsions.

R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
Carefully used.

Chloroform is theoretically contraindicated because of the possible production of central liver necrosis.

Morphine wisely used may be occasionally indicated.

Since the condition is a true toxemia (although the chemical nature of the toxins is unknown) naturally eliminative treatment is indicated. This is secured by careful use of the hot pack, by purgation or even venesection. *Pilocarpine* may be carefully used hypodermically in dose of 1/10–1/5 gr.

*Purgation* is usually obtained by croton oil m. iii or compound jalap powder ℥i, or elaterin gr. 1/8. (See under Constipation.)

**ECZEMA.** See under Skin Diseases.





**EFFUSIONS.** See also Ascites, Dropsy.

Treatment often surgical (paracentesis).

*Iodine* is applied locally, usually as tincture.

R̄. Tincturae iodidi (7%)  
Locally applied.

R̄. Liquoris iodidi compositi (Lugols sol. 5% iodine,  
10% potassium iodide) in aqueous solution.  
Apply locally.

The *Iodides* are prescribed to promote the absorption of exudates. Modus operandi unknown.

R̄. Potassii or sodii iodidi. . . . . .3 gm. (5 grs.)  
Flavored water, essence of pepsin or elixir.

Saturated solution of potassium iodide in which form the drug is frequently given is ordered as follows:

R̄. Potassii iodidi. . . . . .30 gms.  
Aquæ destillatae. . . . . .q. s. *ad* 30 c. c.  
• F. Saturated solution. Begin with five drops  
in milk, water or essence of pepsin, t. i. d.  
and gradually increase to limit required.  
Each drop or minim contains about 1 grain.

In some cases *Salicylic Acid* and *Salicylates* appear to promote the absorption of effusions into serous membranes, as in pleural effusion or in other localities as subretinal effusion.

Diacetylsalicylic acid (Aspirin) is a much used substitute for sodium salicylate for this and other purposes. It should always be born in mind however that the effectiveness of aspirin in any case is due to its content of salicylic acid ions. It is not official.

R̄. Acidi acetosalicylici. . . . . .1 gm. (15 grs.)  
In powder, capsule or mixture, t. i. d.



- R. Sodii salicylatis. . . . . 1 gm. (15 grs.)  
 Aquæ menthæ piperatæ, elixir or other diluent,  
 q. s.  
 T. i. d. Well diluted.

In pleural and pericardial effusions, *Pilocarpine* is advised, it acts through the sweating produced as far as is known. *Pilocarpine* requires care in administration. Heart failure and pulmonary edema are contraindications.

- R. *Pilocapinae hydrochloridi* or *nitratis*  
 Average dose by mouth .01 gm. (1/6 gr.);  
 by hypodermic injection .005 gm. (1/12 gr.)  
 The hydrochloride is the more soluble salt.  
 Internally pilocarpine is usually given in  
 flavored watery solution.

- R. *Pilocarpine hydrochloridi*. . . . . gr. 1/30  
 Aquæ menthæ, anisi, etc. . . . . q. s.  
 T. i. d. or p. r. n. The dose of pilocarpine here  
 is much less than the average U. S. P. average  
 dose since the administration is to be repeated.

**ELEPHANTIASIS.** No effective drug treatment.

**EMISSIONS** Nocturnal. General hygienic rules as to exercise, bowels, etc., are to be observed. Avoid distended bladder. Rational psychotherapy may sometimes be useful.

Central nerve depressants diminish the reflexes which bring it about. The methane narcotics as *Chloral* are much used. Also an alkaloidal narcotic, *Hyoscine*. The *Bromides* are also useful.

- R. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)  
 Chlorali hydrati. . . . . .5 gm. (8 grs.)  
 In dilute solution flavored with syrup and  
 volatile oil preparations.





R. Scopolaminae hydrobromidi, .0003 gm. (1/200 gr.)  
In pill or tablet at bedtime.

**EMPHYSEMA.** Drug treatment is practically that of Bronchitis and Asthma (q. v.) No specific drug treatment is known.

In rare cases surgical treatment (costal cartilage resection) may be indicated. Urgent dyspnoea may require venesection. Heart complications may be treated per secundem artem.

**ENDOCARDITIS.** See also Heart Disease.

**ENTERITIS.** See Entero-colitis, Cholera, Dysentery, Diarrhoea.

**ENTERO-COLITIS.** I. of Children. Is often preventable, occurring usually in summer in bottle fed babies. Dietetic measures extremely important, particularly weaker mixtures with more water and careful sterilization or pasteurization of milk.

Indications for treatment are to promote elimination and allay inflammation.

*Saline Cathartics* are much used as eliminatives particularly *Sodium Sulphate* (Glaubers salt).

*Saline Purgative* + *Anthracine Purgative* (Rhubarb, Senna, etc.) is a common combination. The selected dose of sodium sulphate for a child under one year is 10 grs., under 2 years 20 grs. It must be remembered that there is nothing absolutely specific about the effect of sodium sulphate in this disease.

R. Sodii sulphatis.....15 gms. (℥iv)  
Syrupi zingiberis.....1/4  
Aquæ.....3/4

R. Sodii sulphatis.....15 gms (℥iv)  
Syrupi rhei aromatici.....m.-v x  
Aquæ or aquæ cinnamomi.....℥i  
M. F. ℥i in water q1/2 h. for four or five doses.

In both the above prescriptions the dose of sodium sulphate as given is the average single adult dose prescribed by the U. S. P. IX. Repetition of dose and age of patient may of course require modification.

Other cathartics may of course be used: calomel, phenolphthalein, etc. (For details, see under constipation.)

For allaying the intestinal irritation when this becomes necessary the same principles are involved as are concerned in the general treatment of diarrhoea, consequently the same drugs are used, namely Opium, Bismuth subnitrate, Tannins, etc. (See under Diarrhoea.)

II. of Adults—Chronic Diarrhoea. Examine stools microscopically on fixed or varying diets to detect what particular food is undigested (as starch). Dietetic treatment will be most important. The exact etiological or pathological cause must be ascertained. The general treatment of Diarrhoea by drugs is discussed under that heading.

*Rhubarb* has a considerable reputation in the treatment of chronic diarrhoea of adults, likewise *Ipecac*.

R. Ipecacuanhae.....gr. i \*  
 Pulveris rhei.....gr. v†  
 Sodii bicarbonatis or  
 Pulveris aromatici.....q. s.  
 M. F. Capsule, one t. i. d.

R. Pulveris rhei compositi (rhubarb  
 and magnesia) .....2gms. (30 grs.)  
 Sig. In powder or capsule, p. r. n.

R. Misturae rhei compositae (ipecac, rhubarb,  
 soda, mint) .....4 mls. (3i)  
 Sig., p. r. n.

*Intestinal Antiseptics* are used empirically; results subjective. Examples are Betanaphthol benzoate, Salol, Bismuth, Creosote carbonate, etc.

\*The average Emetic dose is 1 gm.(15 grs.)

†Average dose 1 Gm. (15 grs.)





- R̄. Bismuthi subcarbonatis . . . . . grs. viii  
 Phenylis salicylatis (salol) . . . . . grs. v  
 Powder, t. i. d. before meals.

**ENURESIS** (incontinence of urine). See Cystitis.

**EPIDIDYMITIS.** Treatment often surgical, no very effective pharmacological treatment. The symptom pain may need relief. (See Pain.)

**EPILEPSY.** Under rare circumstances the treatment may be surgical (brain tumors, uterine disorders or ophthalmological (astigmatism). Possibility of syphilis should be investigated.

The *Bromides* are widely used to control the attacks. In a few cases the disease will be cured; in 90–95% the attacks are reduced.

- R̄. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)

- R̄. Ammonii bromidi. . . . . 1 gm. (15 grs.)

The bromides are prescribed in water, flavored with syrup and volatile oils. Begin with small dose and increase up to 10 gms. or about, daily, if necessary. A salt free diet enhances the activity of the bromides.

In severe cases the bromide action is strengthened by the addition of *Cannabis Indica*, *Opium* or *Chloral*:

- R̄. Potassii bromidi . . . . . 15 grs.  
 Chlorali hydrati . . . . . 8 grs.  
 Tincturae opii . . . . . m. 8  
 Syrupi aurantii  
 Aquae . . . . . aa. q. s.  
 Taken properly diluted, t. i. d. or p. r. n.

*Arsenic* is sometimes used—it is held to diminish the acne caused by the bromides—it may be given with bromides as:



℞. Potassii bromidi . . . . . grs. xv  
 Sodii bromidi . . . . . grs. xv  
 Liquoris potassii arsenitis . . . . . m. iii  
 Aquae menthae piperitae . . . . . q. s.  
 Infusi gentianae comp. or other diluent.

The *Antipyrin*, *Acetanilid*, *Phenacetin* series are sometimes used to diminish hyperactivity of motor function of brain, but their use has not been very successful. Temporary improvement has been noted.

(For preparations see under Fever.)

*Note*.—Camphor was formerly given in Epilepsy but its physiological action shows this to be irrational as it is a stimulant to the cerebral cortex. Borax, belladonna, gelsemium, cannabis and many other drugs have been used empirically in epilepsy without substantial effect.

**EPISTAXIS.** See Hemorrhage from Nose.

**EPITHELIOMA.** See Cancer.

**EPULIS.** Treatment strictly surgical.

**ERYSIPELAS.** There is no very effective pharmacological treatment. Symptoms such as Fever and Pain may require to be treated (q. v.).

*Protectives* and *Emolients* are often used in which various antiseptic drugs are incorporated (Resorcin 5%, Ichtlyol 20%, Phenol 2%, Boric Acid 5%, etc.). Results are very doubtful as to the effects of these antiseptics. The protective function of these substances may relieve pain.

For formulae see under Burns or Chilblains.

*Note*.—Iron internally was formerly much used, in fact almost universally. There is no rational basis for this and the results are negative. Antistreptococcus serum is sometimes used but with dubious results.

**EYE.** See Conjunctivitis, Blepharitis, Cornea, Inflammation of.





**FAVUS.** See Skin Diseases.

**FACIAL PARALYSIS.** No pharmacological treatment unless the condition depends upon Syphilis (q. v.).

**FAINTING.** See Collapse.

**FEVER.** See also Typhoid, Rheumatism Acute, Malaria, Influenza, etc.

Hydrotherapy is a most important adjunct in the treatment of fever.

In the beginning of acute fevers a *Purge* is often useful; perhaps through the congestion of the bowel withdrawing the blood from the rest of the body, or through the removal of poisonous substances formed by the decomposition of the intestinal contents.

For list of commonly used purgatives, see under Constipation.

*Quinine* is often used in fevers of whatever origin. It appears to exert its antipyretic effect through an action direct, upon the heat producing foci.

R. Quininae sulphatis, hydrobromidi, hydrochloridi, etc.

Average dose U. S. P. IX, tonic .1 gm. (grs. 1 1/2)  
antimalarial 1 gm. (15 grs.).

In pill or capsule alone or variously combined.

The solution of quinine in water is easily effected by the addition of a little sulphuric or aromatic sulphuric acid which converts the sulphate into the very much more soluble bisulphate; but an intensely bitter taste is thereby developed, hence if the drug is desired in liquid form, it is best to suspend it in syrup of glycyrrhiza (liquorice) or elixir adjuvans, (contains liquorice) or as follows. Liquorice tends to disguise the bitter taste of quinine.

R. Quininae sulphatis . . . . . gr. iss-~~xv~~  
Fluidextracti glycyrrhizae . . . . . 1/3  
Elixiris aromatici . . . . . 2/3  
M. F. Shake well and take p. r. n.

Aromatic elixir of eriodictyon also is pretty extensively used to disguise the bitter taste of quinine.

R̄. Quininae bisulphatis . . . . . gr. iss—xv  
Elixiris eriodictyonis (yerbae sanctae), 3i  
M. F. P. r. n.

R̄. Quininae et ureae hydrochloridi\*  
Single hypodermic dose 1 gm. (grs. xv).

This is a soluble salt of quinine and can be given hypodermically in watery solution. It is used when it is desired to give quinine hypodermically.

*Acetanilid*, *Antipyrin* and *Phenacetin* are very frequently used in treating fever.

R̄. Acetanilidi .2 gm (3 grs.)  
In powder, tablet, capsule, alcoholic solution  
or in hot water cooled down and sweetened  
to taste.

R̄. Antipyrinae .3 gm. (5 grs.)  
In flavored watery solution.

R̄. Acetphenetidini .3 gm. (5 grs.)  
In powder or capsule.

The above antipyretics belong to a pharmacological group and lower the temperature by effecting the heat regulating apparatus. The cutaneous vessels are dilated and heat is dissipated by convection. They act most effectively when given at the commencement of a natural remission in the fever.

Various combinations of drugs are used in the beginning of acute fevers, one of the most affective is *Opium* + *Analgesic* + *Antipyretic* + *Salicylate* + *Quinine*. Example:

\*This salt is also a local anaesthetic.





- ℞. Codeinae sulphatis . . . . . gr. 1/4  
 Acetphenetidini . . . . . gr. 1 1/2  
 Acidi diacetylsalicylici . . . . . gr. iv  
 Cinchonidinae salicylatis . . . . . gr. i  
 M. F. capsules. One q. 2 h.\*

Other drugs used rationally but more seldom in fever are *Aconite*, *Digitalis* and *Alcohol*. *Aconite* and *digitalis* reduce fever chiefly through effects on the circulation. *Alcohol* acts by dilating the peripheral capillaries and as a methane narcotic to which class it belongs.

- ℞. Tincturae aconiti . . . . . .3 gm. (5 minims)  
 In flavored water, p. r. n.
- ℞. Infusi digitalis . . . . . .4 mls. (3i)  
 In water, p. r. n.
- ℞. Spiritus frumenti . . . . .15 mls. (3iv)  
 Well diluted.

The cold bath treatment is the chief rival of the anti-pyretics in treating fever. Temperature is used from 70°–90° F. The action is due to fall in temperature + reflex effects.

The *Diaphoretic* or sweating treatment is often used in the early stages of fevers. *Dovers Powder* is the most effective diaphoretic for such a purpose.

- ℞. Pulveris ipecacuanhae et opii .5 gm. (8 gr.)

*Note:*—Ammonium acetate, potassium nitrate and alkaline carbonates are very feeble diaphoretics and do not deserve the reputation they seem to possess in treatment of fever. The same may be said of the sweet spirits of nitre or spiritus aetheris nitrosi. This contains some alcohol, ether and aldehyde and a slight trace of ethyl

\*In this formula the ingredients are given in doses smaller than the average dose of the U. S. P. since they are intended to be frequently repeated.



nitrite, the last when freshly prepared. The fresh undiluted solution has therefore a slight nitrite effect. But when it is diluted with water the nitrite escapes and the only effect left must come from the very small amount of ether and alcohol which is an almost negligible quantity. It is a very weak compound. It is much used in domestic medicine. Fortunately it is harmless.

**FIBROIDS** (Uterine). Treatment surgical. There is no pharmacological treatment. Deep radiation with massive but well filtered X-rays are much in vogue at the present time. A little more time and experience will possibly be required before the exact status of this treatment will be determined.

**FILARIASIS** (Filarial Fever). One must leave the place in which contracted. Vomiting and Pain may require treatment. Operation may be attempted. There is no pharmacological treatment.

**FISH POISONING.** (Ichthyotoxisinus). The treatment consists in emptying the bowel and attending to symptoms.

**FISSURE** (of Anus; of Nipple). Anal fissure often requires surgical intervention. Care of the nipple during gestation may prevent the occurrence of nipple fissure.

*Cathartics* are often useful in anal fissure, particularly *Sulphur* to keep bowel movements soft. Action is due to the formation of sulphide.

R. Pulveris glycyrrhizae compositae . . 4 gms. (3i)  
Teaspoonful at bedtime mixed in water.

*Astringents* and *antiseptics* are applied locally as suppositories and also *local anesthetics*. *Nitrate of Silver* represent the first two and *Cocaine* or substitute *Eucaïne* the second.

R. Argenti nitratis  
Strong watery solution 10-20% or stick caustic





R̄. Cocainae or eucainae hydrochloridi 2-4%  
Applied locally.

R̄. Cocainae hydrochloridi.....2%  
Acidi borici.....4%  
Adipis lanæ hydrosi.....q. s.  
M. F. Unguentum. Apply locally.

**FISTULA** in Ano. Operation is usually required. Cleansing of sinuses and introduction of Bismuth Paste (Bismuth, Vaseline aa.), may rarely be sufficient where there is no communication with the bowel.

**FLATUS, FLATULENCE.** Dietetic management necessary—see also Dyspepsia. Hot water some time before meals, dry meals and careful mastication may give relief. Proper treatment will of course depend upon proper diagnosis.

The *Spirit of Camphor* is prescribed as a carminative, also spirits of volatile oils; chloroform and ether.

R̄. Spiritus camphoræ. ....1 mil. (15 minims)  
In elixir or water.

R̄. Spiritus menthæ, cinnamomi or anisi 2 mils.  
(30 minims)  
In elixir or water.

R̄. Chloroformi.....3 mil. (5 minims)  
Spiritus chloroformi.....2 mils. (15 minims)  
In water or elixir.

R̄. Spiritus etheris compositi (Hoffman's Anodyne)  
4 mils. (3i)  
In elixir or water.

The alkaline carbonates and bicarbonates are useful—particularly *Magnesium Carbonate* which is laxative.

R̄. Magnesii carbonatis.....3 gms. (45 grs.)  
In powder or mixture.

- R̄. Sodii bicarbonatis. . . . . 1 gm. (15 grs.)  
In flavored watery solution or elixir.
- R̄. Spiritus ammoniae aromatici 2 mls. (30 minims)  
Well diluted in water.
- R̄. Liquoris sodae et menthae N. F. (soda, spirit  
of ammonia and mint) . . . . . 8 mls. (3ii)  
Take p. r. n. Combines action of alkali with  
volatile oil.

*Charcoal* is used internally on account of its capacity to absorb gases which it appears to do either moist or dry.

The prolonged use of charcoal will require occasional purgation to avoid accumulation.

- R̄. Carbonis ligni . . . . . 1 gm. (15 grs.)  
In powder or tablet.

Various *intestinal antiseptics* are often used to combat flatulence, as Salol, Betanaphthol benzoate, Resorcin.

Various combinations of the above drugs are used.

- R̄. Betanaphtholis benzoati . . . . . 5 grs.  
Magnesii carbonatis . . . . . 45 grs.  
Carbonis ligni . . . . . 15 grs.  
Saccharini . . . . . 1/4 gr.  
Olei menthae piperitae . . . . . m. iii  
M. F. powder. Take before meals.

or Charcoal + Alkali + Magnesia

- R̄. Pulveris carbonis ligni . . . . . 15 grs.  
Sodii bicarbonatis . . . . . 15 grs.  
Pulveris rhei compositi . . . . . 30 grs.  
3i mixed in water two hours after meals.

*Purgatives* are perhaps the most effective means of removing flatulence (see under Constipation).

Flatus or abdominal distension following surgical





operation, particularly upon the peritoneally covered viscera, is a special type and may require special measures.

*Physostigminae salicylas* is used hypodermically or by mouth. Average dose .001 gm. (1/60 gr.) repeated p. r. n.

**FLUSHINGS** of Menopause. Tablets of lutein or extract of corpus luteum are used empirically. Results subjective.

**FRECKLES.** See Chloasma.

Most effective measure is prophylactic namely protection from sun's rays. Various drugs have been used locally but are of doubtful efficiency.

**GALL STONES.** See Calculus Biliary.

**GANGRENE.** There is no internal pharmacological treatment. Symptoms may have to be prescribed for, as pain. The cause should be carefully looked for. Examine urine for sugar and albumin.

*Strychnine* is sometimes used on the basis of its stimulation of the cord and tonic effects.

R̄. Elixiris ferri quinae et strychninae N. F. 4 mls.  
(3i)  
Sig. Well diluted, t. i. d.

R̄. Strychninae nitratis or sulphatis .0015 gm. (1/40 gr.)  
Ft. in tablet or solution.

**GASTRALGIA.** See under Colic and Flatulence, also Gastric Ulcer.

**GASTRIC ULCER.** See also Hyperacidity, Hematemesis, Dyspepsia.

A careful study of the stomach contents should be made. The systematic treatment of this disease is largely a



question of dietetics, and of symptomatic treatment (v. s.). Olive oil and cream in small doses are useful. Duodenal feeding with a special small tube is quite the vogue in certain intractable cases. Sometimes surgical procedures gastroenterostomy are required.

*Silver Nitrate* is sometimes given. It acts by precipitating proteids on the surface of the ulcer and as an antiseptic.

R̄. Argenti nitratis . . . . . .01 gm. (1/6 gr.)  
In pills covered with kaolin.

Nitrate of silver is often given combined with belladonna to diminish secretion and reduce motion.

R̄. Argenti nitratis . . . . .1/6 gr.  
Extracti hyoscyami . . . . .gr. i  
Excipient . . . . .q. s.  
M. F. pill. Take an hour or less before eating.

R̄. Argenti nitratis . . . . .1/6 gr.  
Extracti hyoscyami . . . . .gr. i  
Resorcinolis . . . . .gr. ii  
Petrolati . . . . .q. s.  
M. F. pill, as above.

*Bismuth Subnitrate* is much used in gastric ulcer for its absorptive and protective qualities.

R̄. Bismuthi subnitratis or subcarbonatis .5 gm.  
(8 grs.)  
In powder or mixture.

Bismuth is often combined with alkaline carbonates and also with opiates (for pain) and saline (for constipation) in the treatment of gastric ulcer.

R̄. Bismuthi subnitratis . . . . .grs. viii  
Sodii bicarbonatis . . . . .grs. xv.  
Morphinae sulphatis . . . . .grs. 1/8  
Pulv. sacchari albae . . . . .q. s.  
M. F. powder. One t. i. d. after meals.





R. Bismuthi subcarbonatis . . . . . grs. viii  
 Sodii bicarbonatis . . . . . grs. xv  
 Magnesii oxidi . . . . . grs. xxx  
 Morphinae sulphatis . . . . . gr. 1/8  
 M. F. powder. One t. i. d. after meals.

R. Bismuthi subnitratis . . . . . grs. viii  
 Sodii bicarbonatis . . . . . grs. xv  
 Magnesia oxidi . . . . . grs. xxx  
 Extracti belladonnae foliorum . . . . . 1/4 gr.  
 M. F. powder. One t. i. d.

Various local anesthetics particularly *Orthoform* and *Anesthesin* (both esters of benzoic acid) are used alone or added to above drugs. Dose gr. v. p. r. n.

Various *Saline Purgatives* are used since they tend to overcome stasis.

Carlsbad salts have always been popular. The following is an imitation.

R. Sodii sulphatis . . . . . 3iv  
 Sodii bicarbonatis . . . . . grs. xv  
 Sodii chloridi . . . . . 3iv  
 3i in water in morning.

or Artificial Carlsbad Salt of the N. F. IV:

R. Salis Carolini Factitii . . . . . q. s.

This is made in two forms, the amorphous and the crystalline. A solution of 1 gm. of the dry or 1.75 gms. of the crystalline salt in 200 mls. of water is similar to an equal volume of Carlsbad water in its main constituents.

**GASTRIC CATARRH** (Chronic Gastritis). See also Dyspepsia. A careful study of the gastric chemism should be made.

*Bismuth* is beneficial in this condition, particularly in gastric ulcer. Its action is chiefly mechanical. See also Gastric Ulcer.

R̄. Bismuthi subnitratis . . . . . .5 gm. (8 grs.)  
In powder or mucilage suspension.

R̄. Bismuthi subcarbonatis . . . . . .5 gm. (8 grs.) .  
In powder or mucilage suspension.

The condition often disappears under treatment with *Iron*, since it is frequently associated with anemia (see Anemia for full treatment of iron).

R̄. Ferri reducti . . . . . .05 gm. (1 gr.)  
In powder, pill or capsule.

*Iron* and *Bitter* are often given in combination.

R̄. Fluidextracti calumbae N. F. . . . . m. xxx  
Tincturae ferri citrochloridi (N. F.  
tasteless) . . . . . m. viii  
Elixiris aromatici . . . . . ʒi  
Sig. ʒi after meals.

When there is hypoacidity HCL may be indicated. The ferment pepsin has been much used but it is doubtful whether it is ever indicated, certainly not alone.

R̄. Acidi hydrochlorici diluti . . . . . m. xv  
Tincturae gentianae compositae or  
tincturae cardamomi compositae . ʒi  
M. F. Sig. Taken 1/2 hr. after meals.

R̄. Acidi hydrochlorici diluti . . . . . m. xv  
Pepsini . . . . . grs. viii  
Elixiris simplicis . . . . . q. s.  
Sig. ʒi after meals.

**GASTRIC DILATATION.** Treatment mostly dietetic and by lavage and other direct methods.





*Physostigmine* has been used. It stimulates the peripheral terminations of the autonomic fibres of the vagus and is rational. Results sub judice.

R̄. *Physostigminae salicylatis* ...001 gm. (1/60 gr.)  
In pill or solution. Sulphate is more soluble.

*Physostigmine* is sometimes combined with *strychnine*; *strychnine* is not known to have any action on the stomach muscles.

R̄. *Physostigminae salicylatis* .....1/60 gr.  
*Strychninae sulphatis* .....1/40 gr.  
*Extracti gentianae* .....q. s.  
In pill, p. r. n.

**GASTRO ENTERITIS.** See also Entero-Colitis.

The indications are to get rid of the cause and treat the symptoms. Constipation or diarrhoea may require symptomatic attention (q. v.).

**GINGIVITIS.** See also Pyorrhoea, Mouth Infection, Caries, Rigg's Disease. Attend to teeth.

*Tannic Acid* is prescribed, in the treatment of swollen gums, in the form of lozenges; also in solution as mouth wash.

R̄. *Trochisci acidi tannici* in each .06 gm. (gr. i)  
Dissolve in mouth.

R̄. *Acidi tannici* .....2-5%  
Mouth wash or application.

A great variety of astringent and antiseptic drugs are applied to inflamed gums. *Nitrate of Silver* and *Iodine* especially—also *Thymol*.

R̄. *Argenti nitratis* .....5-10% sol.  
Local application.



R̄. Tincturae iodi (7% iodine)  
Local application.

R̄. Liquoris iodi compositi . . . . . (5% I; 10% KI)  
Local application.

The *Chlorate of Potassium* or *Sodium* is frequently used in watery solution or tablet as a mouth wash. The solution should not be swallowed. It is doubtful whether chlorates are more effective than other neutral salts.

R̄. Thymolis . . . . . 1/5%  
Acidi benzoici . . . . . 1-2%  
Olei eucalypti . . . . . 1/2%  
Olei menthae piperitae . . . . . 1/2%  
Alcoholis . . . . . q. s.  
3i to glass of water as mouth wash.

R̄. Phenolis . . . . . 1/2-1%  
Potassii chloratis . . . . . 1%  
Aquæ camphoræ  
Use as mouth wash.

**GLANDERS.** No effective treatment.

**GLAUCOMA.** *Physostigmine* or *Eserine* is the only drug which is used extensively or rationally. It is applied locally 1/3-1% sol. Physostigmine stimulates the terminations of the autonomic fibres of the motor oculi nerve in the iris and ciliary muscle contracting the pupil, accommodating vision for near objects and lowering intra-ocular tension.

R̄. Physostigminae sulphatis . . . . . 1/3-1%  
Aquæ destillatae  
Drop one or two drops in eye every hour or two  
in acute glaucoma or less often in chronic  
form.

*Pilocarpine* is sometimes used. This drug contracts pupil and lowers tension by a mechanism similar to that of physostigmine.





R̄. Pilocarpinae hydrochloridi . . . . . 2% sol.  
Drop in eye, p. r. n.

**GOITRE** (Bronchocele). The treatment is often surgical. *Thyroid extract* is used in goitre with equivocal results. (See also Myxedema.)

R̄. Thyroidei Sicci . . . . . 1 gm. (grs. 1 1/2)  
In powder, tablet or capsule.

The dose is gradually increased.

*Note*:—A variety of local applications are recommended extravagantly in certain quarters. None are of value.

**GOITRE** Exophthalmic. Graves' disease, Basedow's Disease.

General treatment, rest, quiet, ice bag to neck and heart, galvanism, warm baths are all useful.

There is no effective pharmacological treatment for this disease as the large number of drugs used of widely different action indicates. Treatment is symptomatic. For the nervousness *Bromides* and *Opium* are used (see opium preparations under Pain; bromides under Epilepsy).

Pituitary Gland (gr. ii) is frequently given.

Thymus and serum treatment are still sub judice. X-ray is much in vogue and at times effective. Surgical treatment (partial excision) is often necessary.

**GONORRHOEA.** Avoid exercise, alcohol, coffee, spices and much proteid. Rest, suspensory bandage, warm baths or perineal fomentations may assist.

*Benzoic Acid* and *Hexamethylenetetramine* are often prescribed. Benzoic acid is synthesized into hippuric acid in the kidney. Both drugs render the urine acid; they do not kill the gonococcus however.

R̄. Acidi benzoici . . . . . .5 gm. (8 grs.)  
In powder, capsule or tablet.

R̄. Hexamethylenaminae. . . . . 2–6 gm. (3–10 grs.)  
In tablet or solution, p. r. n.

The genito-urinary antiseptics of the volatile oil series are often prescribed after the acute stage. They are *Santol*, *Copaiba* and *Cubebs*. They act apparently by diminishing the exudation. They are given in capsules or emulsion.

R. Olei santali . . . . .5 mil. (8 minims)  
In gelatin capsules or emulsion with acacia.

R. Olei cubebae . . . . .5 mil. (8 minims)  
In gelatin capsules or emulsion.

R. Copaibae . . . . .1 mil. (15 minims)  
In gelatin capsules or emulsion.

They can all be put up in mixture with mucilage of acacia or tragacanth and flavored with some spirit of volatile oil in small amounts.

Urethral injections of various kinds are much used in blennorrhagia.

*Copper Sulphate* is used as an astringent injection 1%. Zinc sulphate 1/4% or alum 1/2-1% are also used.

R. Cupri sulphatis 1% solution in water.

R. Zinci sulphatis 1/4% solution in water.

R. Aluminis 1/2-1% solution in water.

*Silver Nitrate* 1-500 to 1-2000 solution is used as an injection. Very much stronger solutions (up to 5%) are used to abort the disease but are painful. Also organic silver compounds as *Protargol* 1/4-1%.

R. Argenti nitratis 1/20-1/15% in watery solution.  
Inject after urinating.

R. Protargol 1/4-1% (unofficial)  
Inject after urinating.

*Potassium Permanganate* is used extensively as an injection, and irrigation in gonorrhoea. For injection 1-2000-1-1000. For lavage 1-4000-1-2000.





*Note:*—The treatment of gonorrhoea and its complications by vaccines is now being extensively tried. Results sub judice.

**GONORRHOEA** Complications of. Arthritis. Variability and obstinacy are the two most distinguishing features. There is no effective pharmacological treatment. Surgical treatment and vaccines are the order of the day.

Treat anemia if it exists (q. v.). The complications of gonorrhoea in the male and female are very numerous and may require treatment by specialists.

**GOUT.** See also Rheumatism, Arthritis. The pathology of this condition is obscure. It apparently has no connection with the synthesis or excretion of uric acid as was formerly supposed.

*Colchicum* is used but on purely empirical grounds.

R̄. Vini colchici seminis. . . . .2 mls. (30 minims)  
In flavored watery solutions.

*Note:*—Clinical observers differ as to the value of colchicum in the syndrome known as gout. Pharmacologically there is little to recommend the drug. The symptoms produced by the drug are those of gastro-intestinal irritation. There is no direct effect on metabolism, circulation or central nervous system. Colchicum is a drug of doubtful utility and what action it possesses, seems due to gastro-intestinal irritation.

Salicylates, iodides, piperazin, lithium, the bicarbonates and other drugs have been extensively used empirically in gout with results which are much debated. Much remains to be learned concerning the pathology of gout. Many of the cases which until recently were called gout are now believed to be cases of infectious arthritis.

**GRIPPE.** See Influenza.

**HAIR** Loss of. See Baldness.



**HAIR** (Excessive or abnormal growth of).

*Calx Sulphurata* will dissolve the horny constituents of hair and in the form of paste is frequently used.

*Strontium Sulphide* is used for the same purpose. Made into paste with zinc oxide and starch.

**HAY FEVER.** Residence at seashore or mountains may be necessary. Avoidance of agricultural and dusty places. Treat the nose, if abnormality is present.

Hay fever is often relieved by applications of Suprarenal gland preparations.

R<sub>x</sub>. Adrenalin\* 1-1000 sol.

Applied on cotton or spray.

Pollantin locally to eyes and nose is being tried. Results sub judice.

There is no rational pharmacological treatment of this disease and many drugs suggested are certainly useless.

Arsenic, Iodides, Quinine and Suprarenal gland internally are used empirically, with uncertain and frequently disappointing results.

**HEADACHE.** See also Migraine, Neuralgia.

The cause must be sought for in chronic or recurring cases. The cause is usually toxic, circulatory, local or reflex. The following particular causes may be cited. Eye strain from astigmatism or other error of refraction, inflammation of nasal sinuses and antra, tooth infection, toxic states as infectious diseases (influenza, typhoid, malaria, syphilis), autointoxication, biliousness, constipation, tobaccism, alcoholism, anemia, circulatory diseases, arterio-sclerosis, high tension, aortic insufficiency, etc.

Naturally in an individual case one should carefully seek the cause; while endeavoring to do so the symptom itself may require attention and alleviation.

Drugs of *Acetanilid*, *Phenacetin*, *Antipyrin* series are prescribed for the relief of this condition.

\*Unofficial.





- R̄. Pulveris acetanilidi compositi N. F. .3 gm. (5 grs.)  
7 pts. acetanilid, 2 sodium bicarbonate, 1 caffeine  
In powder or capsule.
- R̄. Acetanilidi. . . . . .2 gm. (3 grs.)  
In powder, suspension or capsule.
- R̄. Antipyrinae . . . . .3 gm. (5 grs.)  
In flavored watery solution.
- R̄. Acetphenetidini (phenacetin) . .3 gm. (5 grs.)  
Prescribed like acetanilid.

*Caffeine* relieves some headaches apparently by dilating the cerebral vessels.

- R̄. Caffeinae . . . . .15 gm. (2½ grs.)  
In tablet, capsule, or solution by means of sodium benzoate or salicylate, aa.
- R̄. Caffeinae citratae. . . . .3 gm. (5 grs.)  
In powder, capsule or solution.
- R̄. Caffeinae citratae effervescentis . . .4 gm. (3i)  
In water.

The *Salicylates* are often used in headache and are often effective though in just what type of headache is not clear. Headaches secondary to grip infections, tonsilitis, etc., are especially affected by this drug. (See under Rheumatism for preparations, etc.)

*Opium* compounds may be indicated for relief of pain. (See under Pain for preparations.)

Various local applications are extensively used: as ice bags, cold water, alcohol, cologne, ether, menthol, etc.

The *Bromides* often relieve headache of neuralgic type when due to worry, anxiety or overwork.

℞. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)  
In flavored watery solution.

℞. Ammonii bromidi. . . . . 1 gm. (15 grs.)  
In flavored watery solution.

*Quinine* is beneficial in neuralgic headache especially when periodic, even when malaria is not present, possibly the lessened metabolism may account for the effect.

℞. Quininae sulphatis, hydrobromidi, or hydrochloridi. . . . . 1 gm. (11/2 grs.)  
In pill, tablet, or acid solution.

℞. Tincturae cinchonae  
or  
Tincturae cinchonae compositae . . . . 4mils. (3i)  
In elixir or water.

℞. Fluidextracti cinchonae . . . . . 1 mil. (15 minims)  
In elixir or water.

℞. Elixiris ferri, quininae et strychninae N. F.  
4 mils. (3i)

*Combinations* of drugs are frequently prescribed in headache.

*Bromides + Caffeine + Antipyrine.*

℞. Potassii bromidi. . . . . grs. xv  
Caffeinae citratae. . . . . grs. v  
Antipyrinae. . . . . grs. v  
M. F. powder. Repeat every hour until four  
doses are taken or until relieved.

*Phenacetin + Caffeine + Quinine.*

℞. Acetphenetidini. . . . . grs. iii  
Caffeinae citratae. . . . . grs. v  
Quininae sulphatis. . . . . grs. iss  
M. F. capsules. Repeat, p. r. n.

*Antipyrin + Salicylate.*





- ℞. Antipyrinae . . . . . gr. v  
 Sodii salicylatis . . . . . gr. xv  
 Aquae cinnamomi . . . . . ℥i  
 M. F. Sig. ℥i, p. r. n.

*Acetanilid + Caffeine + Bromide* (Phenacetin can be substituted for acetanilid.)

- ℞. Acetanilidi . . . . . 3 grs.  
 Caffeinae citratae . . . . . 5 grs.  
 Sodii bromidi . . . . . 15 grs.  
 Alcohol, few minims (to dissolve acetanilid)  
 Tincturae cardamomi as flavor  
 Elixiris adjuvantis . . . . . ℥i  
 M. F. Sig. ℥i, p. r. n. for headache.

Elixir adjuvans N. F. is aromatic elixir containing 12% glycyrrhizin. Aromatic elixir, it will be remembered is a cordial flavored with orange, lemon and coriander.

*Opium + Phenacetin + Salicylate + Quinine.*

- ℞. Codeinae sulphatis . . . . . gr. 1 1/2  
 Acetphenetidini . . . . . gr. v  
 Aspirini . . . . . grs. v  
 Cinchonidini sulphatis . . . . . grs. iiss  
 M. F. capsule. Sig. p. r. n.

Headache powders may be made effervescent if desired in the following way.

- ℞. Ingredients of ℞. 1 dose  
 Saccharated sodium bicarbonate N. F.  
 Saccharated tartaric acid N. F. aa. q. s. ℥i.  
 Dose, one teaspoonful.

**HEARTBURN** (Pyrosis). A symptom due to hyperacidity of stomach (q. v.).



**HEART FAILURE.** General principles extremely important.

1. Absolute rest in bed.
2. Depletion by catharsis may be necessary if edema is present.
3. Fluids are usually limited.
4. Proper diet particularly, small feedings.

Venesection or tapping may under certain circumstances be necessary. Proper drug stimulation is conceded to be of great importance (v. i.). Occasionally syphilis in the etiology has to be considered.

The arteries and kidneys are often much involved in individual instances and consequently hypertension with cardiac failure, also pulmonary oedema, angina pectoris etc., may require special consideration.

See also Dropsy, Dyspnoea, Angina, Auricular Fibrillation.

*Digitalis* is indicated in heart failure or asystole.

The action is due to increased ventricular systole and direct diminution of dilatation. The result is increased output from heart, increased velocity and pressure of blood in the arterial circulation, diminished venous congestion and improved nutrition of all organs including the heart. *Digitalis* appears to be most effective in failure with Auricular Fibrillation (q. v.).

R̄. *Digitalis pulveris*. . . . . .06 gm. (1 gr.)  
In pill or capsule.

R̄. *Infusi digitalis*. . . . . .4 mils. (3i)  
In water.

R̄. *Tincturae digitalis*. . . . . .5 mil. (8 minims)  
In water.

Many modified preparations of *digitalis* are on the market as for example *Digalen*, *Digipuratum*, etc., but they are no more effective than good galenical preparations





properly tested and standardized physiologically. It is the physician's duty to obtain a reliable preparation.

Other drugs belonging to the digitalis series are sometimes used, especially *Strophanthus*. *Strophanthin* (crystallized) is much used as an emergency cardiac stimulant. Its absorption is much more rapid than digitalis.

R. Tincturae strophanthi. . . . . .5 mil (8 minims)  
In water or flavored vehicle.

R. Strophanthini U. S. P.  
Average dose by mouth .001 gm. (1/60 gr.);  
intravenous .00075 gm. (1/80 gr.)

Also on the market in sterile ampoules by various manufacturers. It is given hypodermically and repeated once daily for four days if necessary. Larger doses are given now than formerly usually .001 = 1/60 of a grain.

Drugs of the Digitalis series are often associated with Nitrites if there is hypertension: *Digitalis* + *Nitrite*.

R. Tincturae digitalis . . . . . .5 mil. (8 minims)  
Spiritus glycerylis nitratis . . . . .05 mil. (1 minim)  
Given together in water.

The digitalis preparation (infusion or tincture) may be given internally and nitroglycerin by hypodermic injection or by mouth as tablet or in solution.

*Opium* is often a sovereign remedy in desperate cases of heart failure to tide over emergency.

R. Morphinae hydrochloridi or sulphatis .008 gm.  
(gr. 1/8)  
Hypodermically, p. r. n.

R. Morphinae et atropinae\* (gr. 1/120)  
By hypodermic injection.

R. Morphinae . . . . . gr. 1/8  
Atropinae . . . . . gr. 1/120  
Nitroglycerini\* . . . . . gr. 1/100  
By hypodermic injection.

\*Unofficial tablets put up by many pharmacists.

R̄. *Opii pulveris*. . . . . .06 gm. (1 gr.)  
In pill or capsule, p. r. n.

R̄. *Tincturae opii* . . . . . .5 mil. (8 minims)  
In water.

In cases of cardiac weakness without marked dilatation or valvular incompetency, *Caffeine* is of service as it increases the activity of the ventricle. It may be given conveniently in the form of black coffee. Caffeine is more truly a respiratory stimulant and diuretic than a true heart stimulant. Its use should be temporary and its capacity to produce sleeplessness remembered.

R̄. *Caffeinae* . . . . . .15 gm. (2 1/2 grs.)  
In powder, tablet or solution in water with  
sodium salicylate or benzoate.

R̄. *Caffeinae citratae*. . . . . .3 gm. (5 grs.)  
In water.

R̄. *Caffeinae citratae effervescentis* 4 gms. (60 grs.)  
In water.

*Caffeinae sodio-benzoas* by mouth .3 gm. (5 grs.); by hypodermic .2 gm. (3 grs.).

This preparation, which may be obtained as soluble tablets, lends itself well to hypodermic use.

The Carbonate Waters or Spirit of Ammonia are efficient for quick reflex action and are often used for temporary effects in heart failure. Preparations of Ether, Camphor and Alcohol come in the same category.

R̄. *Spiritus ammoniae aromatici* 2 mls. (30 minims)  
In glass of water.

R̄. *Ammonii carbonatis* . . . . . .3 gm. (5 grs.)  
Well diluted in water.





- ℞. Spiritus aetheris compositi N. F. 4 mls. (3i)  
Well diluted in water.
- ℞. Spiritus frumenti or spts. vini gallici\* 15 mls.  
(℥ss.)  
Well diluted in water.
- ℞. Camphoris  
Average dose by mouth .2 gm. (3 grs.)  
By hypodermic .1 gm. (1 1/2 grs.)

It is dissolved in sterile olive oil when intended to be injected hypodermically. The efficacy of camphor injections are disputed but they are nevertheless considerably used.

*Note:*—Sparteine has been used as a substitute for digitalis but such a use is entirely irrational. Sparteine slows the heart but weakens the systole. There is no increase in the arterial pressure.

Salt solution is also wrongly regarded as a heart stimulant. The effects are mechanical, however, and only obtained after hemorrhage. Therefore, the application of salt solution to treatment of heart failure is wrong.

**HEMIPLEGIA.** Treat cause: Syphilis Arteriosclerosis. There is no special pharmacological treatment.

**HEMOPHILIA.** Prophylaxis most important; avoid injuries, wounds or abrasions.

For the various methods of arresting hemorrhage see under Hemorrhage.

Normal horse serum is being rather extensively used in various hemorrhagic diseases at the present time; results are undecided. The serum is given hypodermically in doses of 20-30 c. c. repeated daily and increased to 100 c. c. or more if necessary. Anaphylaxis has occurred.

*Note:*—The salts of Lime do not appear to be capable of increasing the coagulability of the blood in Hemophilia.

\*These substances are no longer official.



**HEMORRHAGE.** The surgical treatment of hemorrhage when it can be applied is of course the ideal method. Blood transfusion is often done. For special hemorrhage as gastric, intestinal (v. i)

Local application of *Adrenaline* is effective 1-1000 solution. Whenever it can be applied to the bleeding point and wherever the affected vessels are innervated by sympathetic vasoconstrictors it will be effective, as for example, bleeding from nose or stomach.

*Tannic Acid* arrests hemorrhage by precipitating the proteids, when it comes into immediate contact with the bleeding point, but it is not of so much value for this purpose as some of the metallic astringents. When the bleeding point can be reached directly the pure acid is used, but for hemorrhage of the intestines or stomach extracts or tincture of the crude drugs are preferred since the presence of colloid matter delays and prolongs action in the alimentary tract.

R. *Acidi tannici\**. . . . . .5 gm. (8 grs.)  
In water internally. For local application solution of tannic acid may be made of any strength or pure if desired.

R. *Extracti krameriae* N. F. . . . .5 mil. (8 grs.)  
In pill.

R. *Pulveris kino et opii compositi* N. F. 1 gm. (15 grs.)  
In powder, pill or capsule.

Dried *Alum* acts as a styptic and is useful in bleeding from nose or teeth.

R. *Alumini exsiccati*  
Apply locally.

R. *Aluminis* (potassium aluminium sulphate) .5 gm. (grs. 8)  
In capsule or locally as powder or concentrated solution.

Unofficial albuminates as tannalbin are also used.





The *Perchloride of Iron* is one of the best styptics of the heavy metal class. It acts by precipitating the proteids and by forming a mass of iron albuminate. It is only of value of course when it can be brought into contact with the bleeding point. It should never be injected into the uterus or subcutaneously on account of the danger of embolism. It is used mostly on bleeding gums.

R̄. *Liquoris ferri perchloridi* .1 mil. (1 1/2 minims)  
Locally, in full strength; internally, diluted.

R̄. *Ferri chloridi*. . . . . .06 gm. (1 gr.)  
In solution. The deliquescent crystals may be used locally.

*Silver Nitrate* is used to arrest capillary hemorrhage; it acts by precipitating the proteids. Silver nitrate blackens on exposure to light.

R̄. *Argenti nitratis fusi* (lunar caustic).  
Locally applied.

Applied locally strong *Acids* have some effect in controlling hemorrhage but are inferior to metallic salts. The acids are applied by means of a glass rod.

R̄. *Acidi sulphurici* 92% locally.

R̄. *Acidi nitrici* 68% locally.

R̄. *Acidi hydrochlorici* 32% locally.

*Isotonic Salt Solution* .6-.9% is given when the body has lost much fluid, subcutaneously, intravenously or per rectum. The solution acts mechanically and not by stimulating the heart per se. Some investigators deny that hypodermochysis is of benefit in hemorrhage. Very large quantities disintegrate the red cells and set free hemoglobin.

R̄. Sodii chloridi . . . . . 7.5–9 g.  
Aquae destillatae 1000 mils.

Inject 100–500 c. c. at a time. Inject slowly either subcutaneously or in a vein at the elbow; the temperature should be between 37°–38° C; the container held about 3 feet high and careful asepsis maintained. The addition of Adrenalin to the solution may be useful as a cardiac and vascular stimulant. Adrenalin solution 1–1000; dose of Adrenalin .0005 gm. (1/120 gr.) obtained by using 1 c. c. of solution.

**HEMORRHAGE.** Special varieties of hemorrhage.

a. Gastric H.: Hematemesis.

*Adrenaline* is administered by the mouth 1–1000 solution; dose  $\frac{1}{2}$ –1 c. c.

This may be repeated according to circumstances and dose increased if necessary to 2 c. c.

b. Intestinal H.

*Opium* is the most efficient drug. It inhibits peristalsis and calms excitement.

R̄. Morphinae sulphatis . . . . . .008 gm. (1/8 gr.)  
Hypodermically.

R̄. Opii pulveris . . . . . .06 gm. (1 gr.)  
In powder or pill.

R̄. Extracti opii . . . . . .03 gm. (1/2 gr.)  
In pill or suppository.

R̄. Tincturae opii . . . . . .5 mil. (8 minims)  
In flavored solution.

c. Nasal H.: Epistaxis.

Adrenaline 1–1000 solution is sprayed into the nose or inserted into the nasal cavities on cotton saturated with the solution. Adrenaline is the most effective local hemostatic in all situations where the vessels are innervated



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by the constrictor nerve fibres from the sympathetic, provided that the drug can be brought into direct contact with the bleeding vessel.

d. Internal H.

Oil of turpentine has been much used in different forms of internal hemorrhages. The effects are doubtful.

R̄. Olei terebinthinae rectificati . . .3 mil. (5 minims)  
In capsule or emulsion with mucilage of acacia.

R̄. Emulsi olei terebinthinae . . . . .2 mils (3ss)

*Note:*—Tannic acid is of no service in internal hemorrhages unless the drug can be put in contact with the bleeding point which of course is only possible in the stomach and intestinal tract. Here it acts by precipitating the proteids. Tannic acid is for the most part decomposed in the intestine into gallic acid, which is non astringent; this is absorbed as a weak alkaline gallate and 99% of this compound is oxidized in the tissues. By this it will be seen how irrational and how futile is the treatment of hematuria, etc., by tannates.

Salts of calcium have been extensively used in internal hemorrhage but appear to be entirely ineffective. All inorganic calcium salts taken internally pass through the bowel unchanged because of their extreme insolubility and impermeability. The coagulation of blood is not reduced in these cases. (See also hemophilia.)

e. Post Partum H.

Packing the uterus with sterile gauze is sometimes the most effective treatment.

*Ergot* is indicated; it hinders bleeding by contracting the uterus. The action is due to ergotoxine which stimulates the motor myoneural junctions of the sympathetic (hypogastric) nerves. *Pituitrin* has a somewhat similar action.

R̄. Fluidextracti ergotae . . . . .2 mils. (30 minims)  
In water, p. r. n.









h. Uterine H. See also above under Post Partum H.  
*Hydrastis* seems to be indicated in excessive menstrual flow; it acts by constricting the vessels.

R̄. Hydrastinae hydrochloridi . . .03 gm. (1/2 gr.)  
 Hypodermically or by mouth in pill.

R̄. Fluidextracti hydrastis . . .2 mls. (30 minims)  
 In water or elixir.

*Ergot* is also indicated. (See above under Post Partum hemorrhage.)

**HEMORRHOIDS.** Treatment often surgical. Various causes may require treatment; constipation, pelvic disease, portal obstruction, stricture, etc.

*Dried Alum* is applied to hemorrhoids, condylomata and exuberant granulations. It acts by withdrawing fluid from the tissue.

R̄. Aluminis exsiccati  
 Locally as mild caustic.

Various astringent antiseptic and analgesic substances are put up as suppositories or ointments and introduced into the rectum in treating hemorrhoids. Suppositories and ointments are made with fatty bases which act as emollients and to which some of the effects are due. A few prescriptions will be given. There is no need of extensive multiplication.

R̄. Cocainae hydrochloridi . . . . . 1/5%  
 Extracti belladonnae . . . . . 10%  
 Acidi tannici. . . . . 20%  
 Petrolati  
 Lani or adipis benzoinati  
 M. F. unguentum.

R̄. Acidi tannici . . . . . gr. iv  
 Extracti belladonnae . . . . . gr. ii  
 Extracti hamamelidis . . . . . gr. iv  
 Olei theobromatis . . . . . q. s.  
 M. F. suppository.

In hemorrhoids *Sulphur* is advised on account of its rendering the stools soft; it does this by being converted to sulphide in the intestine.

R̄. Sulphuris praecipitati. . . . . 4 gm. (60 grs.)  
In powder.

R̄. Pulveris glycyrrhizae compositae (sulphur +  
senna) . . . . . 4 gms. (60 grs.)  
To be taken mixed in water.

**HEPATIC DISEASE.** See Liver Diseases of.

**HERPES.** There is no efficient pharmacological treatment. Pain sometimes requires to be treated particularly in zoster. Protective powders are used on the eruption as zinc oxide, talcum, kaolin, boracic acid.

**HERPES ZOSTER.** Rest in bed with dusting powder applications as zinc oxide, starch, talc. Sedatives may be necessary for Pain (q. v.)

**HICCOUGH** (Singultus). Often Dyspeptic (see Dyspepsia).

Various minor schemes of inhibiting hiccough consist in holding the breath, drinking cold water, sipping hot water, etc. If the symptom lasts its cause should be ascertained. Central nerve depressants are used to diminish the reflex; as *Bromides*.

R̄. Sodii or potassii bromidi. . . . . 1 gm. (grs. 15)

R̄. Ammonii bromidi. . . . . 1 gm. (grs. 15)

Both the above are given in solution, flavored if necessary, with syrup and volatile oil preparations and taken well diluted.

Various other substances are used empirically as Aromatic Spirit of Ammonia, m. xx. well diluted.





**HOARSENESS.** Treat the cause as Syphilis, Laryngitis. *Cubeb* lozenges are sucked; the pungent stimulation relieves.

R̄. Trochisci cubebae  
Dissolve in mouth.

**HODGKIN'S DISEASE.** Pseudoleucemia.

*Arsenic* is most used; by no means always proves beneficial.

R̄. Arseni trioxidi . . . . . .002 gm. (gr. 1/30)  
In pill or solution after meals.

R̄. Liquoris acidi arsenosi (1%) .2 mil. (3 minims)  
3-5 m. diluted, after meals.

R̄. Liquoris potassii arsenitis (1%) .2 mil. (3 minims)  
3-5 drops diluted after meals.

**HOOKWORM.** See Uncinariasis.

**HYDROCELE.** Sometimes treated with injections of iodine. Ideal treatment, however, purely surgical.

**HYDROPHOBIA.** Pasteur serum treatment the only successful method. The treatment requires special laboratory facilities which may be obtained in some of the large cities.

*Curare* has been used successfully in some cases. The preparation used should have been physiologically tested previously. It acts by paralyzing the peripheral terminations of the motor nerves in voluntary muscle. The sample must be tested on animals and the commencing dose very small.

**HYPERACIDITY** See also Dyspepsia, Gastric Ulcer.

The *Alkaline Carbonates* given after meals, act efficiently as antacids.

R̄. Potassii bicarbonatis . . . . .1 gm. (15 grs.)  
Well diluted with water or peppermint water.



- R̄. Sodii bicarbonatis . . . . . 1 gm. (15 grs.)  
Well diluted as above.

In gastric hyperacidity *Magnesium Oxide* and *Magnesium Carbonate* are indicated; also in acid putrefaction in the bowel. They are slightly irritating and cause some aperient action.

- R̄. Magnesii oxidi or magnesii oxidi ponderosi 2 gms.  
(30 grs.)  
In powder.

- R̄. Magnesii carbonatis. . . . . 3 gms. (45 grs.)  
In powder or effervescent (soluble in excess of CO<sub>2</sub>)

- R̄. Magmae magnesiae (milk magnesia) 10 mls.  
(3iiss)

- R̄. Magnesii oxidi . . . . . grs. xxx  
Saccharated sodium bicarbonate  
Saccharated tartaric acid  
Effervescent powder  
After meals.

- R̄. Pulveris rhei compositi (rhubarb 25%, magnesia 65%) 2 gms. (30 grs.)  
Taken p. r. n.

The preparations of *Calcium Carbonate* are used as antacids, especially when diarrhoea is present; also lime water, and syrup of lime. Opium and various astringents may be added if necessary.

- R̄. Calcii carbonatis praecipitati . . . 1 gm. (15 grs.)  
In powder or mixture with acacia.

- R̄. Cretae preparatae . . . . . 1 gm. (15 grs.)  
In powder or mixture with acacia.

- R̄. Pulveris cretae compositi . . . . . 2 gms. (30 grs.)  
In powder or mixture.





- R̄. Misturae cretae . . . . . 15 mils. (℥iv)  
P. r. n.

*Combinations frequently used in hyperacidity:*

- R̄. Cretae preparatae . . . . . grs. xv  
Pulveris opii . . . . . gr. i  
M. F. in powder.
- R̄. Sodii bicarbonatis . . . . . grs. xv  
Magnesii oxidi . . . . . grs. xxx  
Cretae preparatae . . . . . grs. xv  
M. F. powder. Sig., after meals.  
M. F. powder. These ingredients may be prescribed in equal amounts and ℥ss. to ℥i taken at a dose.
- R̄. Potassii bicarbonatis . . . . . grs. xv  
Bismuthi subnitratis . . . . . grs. viii  
Carbonis ligni pulveris . . . . . grs. xv  
Cretae preparatae . . . . . grs. xv  
Sodii bicarbonatis . . . . . grs. xv  
M. F. powder. The ingredients may be prescribed in equal amount and ℥ss to ℥i taken at a dose.
- R̄. Sodii bicarbonatis . . . . . grs. xv  
Bismuthi subnitratis . . . . . grs. viii  
Mucilaginis acaciae . . . . . q. s.  
Aquae menthae piperitae . . . . . q. s.  
M. F. Shake and take p. r. n.
- R̄. Menthol . . . . . gr. i (.06 gm.)  
Spts. vini gallici . . . . . ℥ss  
Solve et adde.  
Sodii bicarbonatis . . . . . grs. xv  
Bismuthi subnitratis . . . . . grs. vii  
Aquae cinnamomi  
Shake well and take t. i. d., p. c.

**HYPERACIDITY** of Urine. See also Cystitis.

In hyperacidity of urine the *Alkalies* are efficacious; they relieve the irritation of the bladder and pain of micturition.

- ℞. Liquoris potassii or sodii hydroxidi 1 mil. (15 minims).  
Well diluted in water or flavored with peppermint, etc.
- ℞. Potassii carbonatis or bicarbonatis 1 gm. (15 grs.)  
Diluted, alone or as above.
- ℞. Sodii carbonatis monohydrati . . . 25 gm. (4 grs.)  
or  
Sodii bicarbonatis. . . . . 1 gm. (15 grs.)  
As above.
- ℞. Potassii citratis. . . . . 1 gm. (05 grs.)  
Taken well diluted.

Combinations of the above may be given and an effervescent mixture made if desired by adding equal parts of saccharated sodium bicarbonate (N. F.) and saccharated tartaric or citric acid (N. F.) to the desired dose.

- ℞. Potassii citratis. . . . . grs. xv (1 gm.)  
Sodii bicarbonatis. . . . . grs. xv (1 gm.)  
Saccharated sodium bicarbonate  
Saccharated citric acid aa. q. s. ad ℥ii  
℥ii in 1/2 glass water, p. r. n.

*Demulcents* such as flax-seed tea and barley water are used to dilute the urine. They act by virtue of the large quantity of fluid and not because of the demulcent. *Imperial Draught* is extensively used for same purpose. It consists of cream of tartar ℥i in boiled water or with juice of half a lemon and a little sugar for taste.

**HYPERIDROSIS.** Excessive sweating. See also Bromidrosis.





*Atropine* is used. It stops perspiration by paralyzing the peripheral terminations of sympathetic fibres to the sweat glands.

- R̄. Atropinae sulphatis. . . . . .0005 gm. (1/120 gr.)  
In tablet or solution.
- R̄. Extracti belladonnae foliorum .015 gm. (1/4 gr.)  
In pill, p. r. n.
- R̄. Tincturae belladonnae foliorum .75 mil. (12 minims)  
In water or flavored solution.
- R̄. Fluidextracti belladonnae radice .05 mil. (1 minim)  
In water or flavored solution.

Locally astringent drugs are used as *Tannic Acid*.

- R̄. Acidi tannici. . . . .1-4% solution or powder.  
Locally applied.
- R̄. Aluminis. . . . .1-4% solution or powder  
Locally applied.

**HYPOACIDITY.** *HCL* is indicated in deficiency of acid in the gastric juice. It is given about an hour after meals. Besides supplying deficient acidity it disinfects the stomach contents and prevents lactic acid fermentation (even in 1-1000 dilution).

- R̄. Acidi hydrochlorici diluti . . . .1 mil. (15 minims)  
In glass of water.

The *Simple Bitters* are given usually before the meal, Gentian, Quassia, Calumba, Chirata.

- R̄. Tincturae gentianae compositae . .4 mils. (3i)  
In water or elixir.





**IMPOTENCE.** See Debility.

Attend to general health and examine local conditions. A good many drugs have been suggested but none appear to possess any characteristic effects. Uncomplicated impotence is very rare.

Yohimbin is said to stimulate the erection centre in the cord. Whether it really does so in human beings is open to question.

*Strychnine* is used for its effect of raising the reflex excitability of the central nervous system.

R̄. Strychninae sulphatis...0015 gm. (1/40 gr.)  
In pill, tablet or solution.

R̄. Extracti nucis vomicae . . . . .015 gm. (gr. 1/4)  
In pill.

*Phosphorus* is much used. The inorganic phosphates are inapplicable because the tissues are unable to split off and metabolize phosphorus in such forms.

R̄. Phosphori. . . . .005 gm. (gr. 1/120)  
In pill or dissolved in oil.

R̄. Piluale phosphori each .6 mg., 1 pill

**INCONTINENCE OF URINE.** In adults it may be due to retention from enlarged prostate, urethral obstruction, etc. Here the treatment is principally surgical. In children it may be due to worms, phimosis, constipation, etc., (q. v.)

*Belladonna* (Atropine) is much used. This drug does not affect urinary secretion as much as bladder movements which it inhibits through a depression of the terminations of motor nerves.

R̄. Extracti belladonnae foliorum .015 gm. (gr. 1/4)  
In pill.

R̄. Tincturae belladonnae foliorum .75 mil. (12 minims)  
In flavored solution.

R̄. Fluidextracti belladonnae radicis .05 mil. (1 minim)  
In flavored solution.

R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
In tablet, pill or solution.

**INFLUENZA.** Grip. See also Catarrh, Cough, Pneumonia, Bronchitis, Tonsilitis, Debility.

Rest in bed with restricted diet is indicated.

The *Salicylates* are much used; they may possess an aetiotropic function, *i. e.* act upon the microbic cause of the disease.

R̄. Acidi salicylici. . . . .75 gm. (12 grs.)  
In capsule or tablet.

R̄. Sodii salicylatis. . . . .1 gm. (15 grs.)  
In capsule, tablet or flavored syrup.

*Quinine* is also much used; it also may possess an aetiotropic function.

R̄. Quininae sulphatis . . . . .1 gm. (1 1/2 grs.)  
In capsule or mixture with fluidextract of licorice and elixir.

R̄. Tincturae cinchonae . . . . .4 mils. (3i)  
In flavored solution.

The synthetic antipyretics *Acetanilid*, *Antipyrin*, *Phenacetin* group, are much used; they act as antipyretics and analgesics.

R̄. Acetanilidi. . . . .2 gm. (3 grs.)  
In powder, capsule or suspension.





R̄. Antyprinae . . . . . .3 gm. (5 grs.)  
In flavored watery solution.

R̄. Phenacetin . . . . . .3 gm. (5 grs.)  
In powder or capsule.

Several useful combinations of the above may be made:

R̄. Antipyrinae . . . . . grs. v  
Quininae bisulphatis . . . . . grs. iss  
Sodii bicarbonatis . . . . . grs. xv  
Saccharated citric acid or  
Saccharated tartaric acid . . . . . aa. ʒi  
Ft. effervescent powder, p. r. n. One dose—  
make as many as required. Take heaping  
teaspoonful q. 3 hrs. in glass of water. The  
sodium bicarbonate is added to reduce acidity  
and is only really necessary when acetanilid  
is selected.

or

Acetphenetidini . . . . . grs. v  
Quininae sulphatis . . . . . grs. iss  
Sodii salicylatis . . . . . grs. xv  
Three capsules at dose. Repeat p. r. n.

In the early stage of grip, combinations such as the  
following are much used and are extremely effective  
namely: *Opiate + Antipyretic + Analgesic + Salicylate*  
*+ Quinine.*

R̄. Codeinae sulphatis . . . . . gr. 1/4  
Acetphenetidini . . . . . grs. ii  
Aspirin . . . . . grs. iv  
Cinchonidinae salicylatis . . . . . gr. i.  
M. F. capsule. One q. 2 h. or p. r. n. Doses  
are smaller than U. S. P. average because of  
frequent repetition.

**INSOMNIA.** Treat cause when possible as Pain, Fever,  
Neurosis, Heart Failure, Hypertension, Intoxication, Icter-  
us, Uremia, etc.

Modify unhygienic factors if possible, as sedentary occupation, excitement, coffee, tea, superheated atmosphere, noise, etc.

A warm general bath, foot bath or hot drink at bedtime are often effective. In using hypnotic drugs the same one should not be constantly repeated.

In old persons a little whiskey and water may be sufficient.

The following drugs are effective in producing sleep.

- R̄. Chlorali hydrati. . . . . .5 gm. (8 grs.)  
In flavored watery solution or elixir.
  
- R̄. Paraldehydi. . . . . .2 mils. (30 minims)  
Given diluted, flavored with tinct. vanilla and  
aa. of peppermint water and orange syrup.
  
- R̄. Sulphonmethani (sulphonal) . . .75 gm. (12 grs.)  
In powder taken in hot water or milk.
  
- R̄. Sulphonmethylnmethani (trional) .75 gm. (12  
grs.)  
In powder taken in hot water or milk.
  
- R̄. Chloralamidi (unofficial). . . . .1 gm. (15 grs.)  
In alcoholic aromatic solution.
  
- R̄. Ethylis carbamatis (urethane) . .1 gm. (15 grs.)  
In solution in water.
  
- R̄. Bromoformi . . . . . .2 mil. (3 minims)  
In capsule or acacia mixture.
  
- R̄. Veronal (unofficial). . . . . .5 gm. (8 grs.)  
In powder or tablet.
  
- R̄. Tetronal (unofficial). . . . . .1 gm. (15 grs.)  
In powder or tablet.







R. Bromoformi.....m. iij  
 Alcoholis.....q. s.  
 Glycerini.....q. s.  
 Aquae anisi..... $\frac{5}{8}$ ss  
 At bedtime.

Hypnotics of the sulphonal group are slowly absorbed hence slow to act.

In sleeplessness from anxiety, the *Bromides* are valuable. They may be prescribed along with chloral.

R. Potassii or sodii bromidi.....1 gm. (15 grs.)  
 In solution; may be flavored with syrup and volatile oil preparations.

R. Chlorali hydrati......5 gm. (8 grs.)  
 In dilute solution, often in syrup.

If insomnia is due to pain, cough or dyspnoea, *Opium* is indicated. It may be combined with chloral. For preparations of opium see under *Pain*.

Combinations:

*Bromides* + *Chloral* are much used and are rational.

R. Sodii bromidi.....grs. xv  
 Potassii bromidi.....grs. xv  
 Chlorali hydrati.....grs. viii  
 Syrupi aurantii..... $\frac{1}{3}$   
 Elixiris simplicis..... $\frac{2}{3}$   
 M. F. Sig.

*Opium* or *Hyoscine* + *Bromide* + *Chloral* is a combination sometimes used.

Or *Codeine* + *Methane hypnotic*, as:

R. Codeinae sulphatis.....gr.  $\frac{1}{2}$   
 Trionalis.....grs. xv  
 or  
 Veronalis.....grs. viii  
 In powder at bedtime.

R. Codeinae sulphatis. . . . . gr. 1/2  
 Trionalis. . . . . grs. xv

III

Chloralamidi. . . . . grs. xv  
 In powder at bedtime.

Many other combinations may be made but it seems superfluous and useless to multiply them.

*Alcohol* in the form of beer, spirits or brandy may afford relief in insomnia. They are taken at bedtime, always well diluted.

Alcohol is very exceptionally prescribed on account of danger of habit formation.

In some cases of insomnia *Hot Water* may cause sleep by dilating the gastric vessels and by withdrawing blood from the brain.

Many combinations of drugs for insomnia have been devised and recommended and there is no doubt that certain combinations are more effective than others, or the single drugs used in them but there is no good reason for uselessly multiplying them. The student is recommended to exercise discrimination in inventing multiple hypnotic prescriptions.

**INTERTRIGO** (Chafing). Protective powders and emollients are used, as zinc oxide, boracic acid, boroglycerid, cold cream (ungt aquæ rosæ), petrolatum, etc.

**INTESTINAL PUTREFACTION.** See also Diarrhoea, Constipation.

Cultures of *Bacillus of Lactic Acid* have been much used in recent years since Metchnikoff introduced the treatment. Fresh cultures and freshly prepared tablets are used. Buttermilk contains the bacillus. The Bulgarian bacillus as it has lately been called is highly recommended on apparently rational grounds in the treatment of infantile diarrhoea. The results are sub judice.

**IRITIS.** Treat the cause, as Injury, Syphilis, Rheumatism.

*Mercury* is almost universally used in acute iritis.





- R̄. Hydrargyri cum creta . . . . . .1-.5 gm. (2-8 gr.)  
In powder.
- R̄. Hydrargyri chloridi mitis . . .0015 gm. (1/4 gr.)\*  
In powder or capsule.

*Atropine* and *Homatropine* are used locally.

- R̄. Atropinae sulphatis . . . . .1/2-1% solution  
One drop in eye twice or more daily.
- R̄. Homatropinae hydrobromidi . . . .1% solution  
Drop in eye twice or more daily.

The *Salicylates* are much used empirically.

- R̄. Sodii salicylatis . . . . . .3-1 gm. (grs. 5-15 +)  
In flavored solution with potassium bicarbonate  
and peppermint water to reduce urinary  
acidity.
- R̄. Sodii salicylatis  
Potassii bicarbonatis . . . . .aa. grs. xv  
Aquæ menthae piperitae . . . . .3i  
M. F. Sig. in water, p. r. n.

**ITCHING.** See also *Pruritis Ani*, etc.

Think of scabies, skin diseases, pediculosis.

*Carbolic acid (Phenol)* 1-2% applied locally is efficacious. Other phenol-like substances such as *Menthol* and *Thymol* are much used.

- R̄. Phenolis . . . . .1-2% solution . . .  
Locally in lotion or ointment.
- R̄. Phenolis . . . . .1%  
Glycerini . . . . .4%  
Alcoholis . . . . .10%  
Aquæ rosae . . . . .q. s. 100%

\*This is the average alterative dose U. S. P. IX.

- R. Phenolis . . . . . 2%  
 Petrolati or ungt. aquæ rosæ.

*Menthol* and *Thymol* locally are efficacious but menthol may be objectionable on account of stimulation of the cold nerves.

- R. Mentholis . . . . . 2-5%  
 Alcoholis . . . . . 10%  
 Aquæ rosæ . . . . . q. s.  
 M. F. solution.

- R. Mentholis . . . . . 2-5%  
 Thymolis . . . . . 2-5%  
 Adipis lanæ . . . . . 40%  
 Petrolati albi . . . . . q. s. ad 100%  
 M. F. Ungt. use locally.

- R. Mentholis or thymolis . . . . . 5%  
 Olei olivæ  
 Apply locally.

*Camphor* spirit or liniment is useful. Camphor depresses the peripheral sensory terminations.

- R. Spiritus camphoræ  
 Locally.  
 R. Linimenti camphoræ (camphorated oil)  
 Locally.

A 2% solution of dilute *Hydrocyanic Acid* is applied to the unbroken skin; other acid solutions are often used as acetic acid 5%, vinegar 10%.

- R. Acidi hydrocyanici diluti . . . . . 2%  
 Liable to decomposition if kept long. Use locally.

In itching due to skin diseases the *Carbonates* are applied in strong solution or paste. Owing to their alkalinity (OH), they dissolve the epithelium.







- R̄. Potassii or sodii carbonatis . . . . . q. s.  
Make paste. Use locally.

Internally *Bromides* are used in itching. They act by depressing the central nervous system.

- R̄. Potassii or sodii bromidi . . . . 1 gm. (15 grs.)  
In solution flavored with syrup and volatile oil preparations. Well diluted.

Combinations. Phenol is combined with other related substances such as Menthol or Thymol or with Alkalies.

- R̄. Phenolis . . . . . 1–2%  
Mentholis . . . . . 1–2% +  
Spts. camphorae  
Spts. myrciae . . . . . aa. q. s. ad 100  
M. F. Apply locally.

- R̄. Phenolis . . . . . 2%  
Thymolis . . . . . 1/2%  
Resorcini . . . . . 4%  
Sodii biboratis . . . . . 4%  
Glycerini . . . . . 2–4%  
Alcoholis . . . . . 5%  
Aquæ . . . . . 100  
M. F. lotion.

- R̄. Phenolis . . . . . 1/2%  
Liquoris potassii . . . . . 1/2%  
Petrolati liquidi . . . . . q. s.  
Use externally.

- R̄. Phenolis . . . . . 1/2%  
Sodii bicarbonatis . . . . . 20%  
Glycerini . . . . . 10%  
Aquæ . . . . . q. s.  
Apply locally.

R̄. Mentholis.....1%  
 Thymolis.....1%  
 Alcoholis.....25%  
 Aquæ.....q. s.  
 Apply locally.

R̄. Camphoræ.....10%  
 Zinci oxidi.....40%  
 Amyli.....q. s. 100  
 M. F. dusting powder.

**IVY POISONING.** Alcohol dissolves the toxicodendrol. This must be washed off. Dilute solution of *Subacetate of Lead* is a precipitant for the same.

R̄. Liquoris plumbi subacetatis diluti 1%  
 Apply locally.

**JAUNDICE.** Ascertain and treat the cause. Gall stones, Catarrh of bile ducts, etc.

Symptoms such as Itching, Flatulence and Constipation, may require treatment.

*Alkaline Carbonates* are used with benefit.

R̄. Potassii carbonatis.....1 gm. (grs. 15)  
 or  
 Sodii carbonatis monohydrati .25 gm. (4 grs.)  
 In solution or capsule.

R̄. Potassii or sodii bicarbonatis...1 gm. (15 grs.)  
 In solution or capsule.

*Mercurial Purgatives* (Calomel) are used as intestinal disinfectants. Calomel is not a chologogue however.

R̄. Hydrargyri chloridi mitis (calomel)  
 In powder, p. r. n. Average dose U. S. P. IX.,  
 laxative .15 gm. (2 1/2 grs.), alterative .015  
 gm. (1/4 gr.)







- R̄. Hydrargyri chloridi mitis  
 Oleosacchari anisi (or other sugar). . . q. s.  
 M. F. Repeat, p. r. n. Dose as above.

The *Salicylates* are eliminated to a certain extent in the bile and may therefore be tried. The same may be said of *Hexamethyleneamine* which Crowe of Hopkins found is eliminated in the bile.

- R̄. Sodii salicylatis. . . . . 1 gm. (15 grs.)  
 In capsule or flavored solution.

- R̄. Hexamethyleneaminae . . . . . .25 gm. (4 grs.)  
 In tablet, solution, capsule or in effervescent solutions.

*Note:*—Nitrohydrochloric acid is often used in Jaundice and various diseases of the liver. It has, however, only an acid function in the alimentary canal and can only be absorbed after neutralization. Some authors recommend the local application of the acid to the skin over the liver or even to the feet as a foot bath. This seems ridiculous.

**KALA AZAR.** A chronic tropical piroplasmosis not seen in this country.

*Quinine* is most often used but not a specific.

**KELOID.** No specific pharmacological treatment is known. Often treated at the present time by X-ray radiation.

**KERATITIS.** See Cornea, Inflammation of.

**LABOR.** Parturition. See also After Pains, Hemorrhage post partum, Pain, Uterine inertia.

The use of drugs during labor is rather limited. The use of anaesthetics is of course important. The question of twilight sleep so much discussed at the present time is itself apparently undergoing a kind of "dämmer Schlaf." The question of twilight sleep cannot be discussed in a book of this kind. The reader is referred to Works on Obstetrics.

**LACTATION.** It may be desired under differing circumstances either to increase or diminish (abolish) the secretion of milk. Drugs do not appear to have reliable effects—see Agalactia. There is no drug which has much effect in diminishing the secretion of milk. Belladonna which has long been used is of doubtful efficiency. When sucking stops mere pressure or non use will usually suffice.

**LARYNGISMUS STRIDULUS.** May be due to adenoids, rickets, etc. No satisfactory treatment with drugs is known. (See Laryngitis.)

### LARYNGITIS.

#### Acute L.

Warm room and moist air are indicated. Fever and cough may require treatment (q. v.). There is no special treatment except it be symptomatic. The cause should of course be ascertained.

Locally, sprays of antiseptics (volatile oils, etc.) are used; Menthol, Eucalyptol, are often used. Sprays containing phenol or cresol bodies should be avoided.

R. Mentholis.....1/2-1%  
 Eucalyptolis.....1/2-1%  
 Albolene  
 Use as spray.

Laryngitis, chronic (often tubercular, syphilitic or malignant.)

Antiseptics and irritants are locally applied.

#### Chronic L.

R. Tincturae iodi.....3ii 8%  
 Acidi carbolicis.....3ii 8%  
 Tolu, soluble fld.....3i  
 Glycerini.....3i  
 Alcoholis.....3iii  
 Locally applied to larynx.

Chronic laryngitis may be tubercular or syphilitic. The nose and throat should be treated locally. Solution







of iodine in glycerin makes an extremely effective and much used application for chronic non-tubercular and non-luetic laryngitis.

**LEAD COLIC** (Plumbism). See also Colic, Paralysis.

Prophylaxis is most important, of which cleanliness is the chief factor.

Croton oil purgation produces effects more rapidly than the other purgatives.

R̄. Olei tiglii . . . . . .05 mil. (1 minim)  
In pill, with bread crumbs or on lump of sugar.

*Saline Cathartics* are also used: besides those preparations mentioned below the Seidlitz and other effervescent powders may be used.

R̄. Magnesii or sodii sulphatis. . . . .15 gms. (℥iv)  
In water or effervescent solution.

R̄. Sodii phosphatis . . . . .4 gms. (℥i)  
In water or effervescent solution or as compound solution (N. F. dose ℥ii).

R̄. Potassii et sodii tartratis (Rochelle Salt) 10 gms.  
(℥iiss)  
In water.

*Opium* may be necessary for pain and *Belladonna* to diminish spasm.

(For opium preparations see under Pain. For *Belladonna* see under Asthma.)

Combinations of *Opium*, *Belladonna* and *Croton Oil* are used.

R̄. Pulveris opii . . . . .gr. i  
Extracti belladonnae foliorum . . . . .gr. 1/4  
Olei tiglii . . . . .m. i  
M. F. pill. Sig., one every 2 hrs. until relieved.

*Note:*—The iodides are much used in lead colic. They cannot be considered superior to the bromides or chlorides and the results are very doubtful.

**LEPROSY.** No effective pharmacological treatment is known.

Chaulmoogra oil and Gurjun Balsam are given internally. The results are doubtful.

**LEUCEMIA.** X-ray treatment is much used; the bone marrow is especially radiated.

*Arsenic* is used empirically and with varying success. It seems to be an effective drug in this disease.

R̄. Arsenii trioxidi. . . . . .002 gm. (1/30 gr.)  
In pill or solution after meals.

R̄. Liquoris potassii arsenitis . . . . .2 mil. (3 minims)  
Three to five drops, t. i. d.

*Benzol* has recently been found quite efficient as a leucocytolytic agent in Leucemia and Hodgkin's disease (Von Koranyi); it is miscible with alcohol and oils.

R̄. Benzini purificati (Benzol) .25 mil. (4 minims)  
Given in emulsion in capsules or on sugar. U.  
S. P. IX does not prescribe dose, probably because the introduction of the benzene or benzol treatment of Leucemia by V Koranyi and its popularization in this country by Billings and others is of quite recent date.

**LEUCORRHOEA.** Treatment often surgical. Anemia may be present. Local causes must of course be eliminated.

*Astringents* and *Antiseptics* in great variety are used, particularly boric acid 2–4%, alum 1–5%, zinc sulphate 5–10%, tannic acid 1–5%, carbolic acid 1–2%, potassium permanganate 1/10–1/5%.





- ℞. Aluminis.....75%  
 Acidi borici.....25%  
 3i to quart of warm water as douche.
- ℞. Zinci sulphatis.....50%  
 Plumbi acetatis.....50%  
 3ss to quart of water as douche.
- ℞. Sodii biboratis.....5%  
 Acidi tannici.....20%  
 Glycerini.....q. s.100%  
 3i to pint of water as douche.
- ℞. Phenolis.....20%  
 Zinci sulphatis.....10%  
 Aluminis.....10%  
 Glycerini  
 Aquæ.....aa. q. s. ad 100  
 3i in pint of water as douche.

**LICE.** See Pediculosis.

**LIVER, DISEASES OF.** See Cirrhosis Hepatic.

**LOCOMOTOR ATAXIA** (Tabes). Always a parasymphilitic disease and the only treatment effective is antisymphilitic. Mercury is extensively used and recently Salvarsan..  
 See Syphilis.

**LUMBAGO.** See also Rheumatism, Influenza, Arthritis, Sciatica.

The matter of first importance is diagnosis.  
 The *Salicylates* are much used.

- ℞. Acidi salicylici......75 gm. (12 grs.)  
 In capsule or tablet followed by water.
- ℞. Sodii salicylatis.....1 gm. (15 grs.)  
 In capsule, tablet or flavored solution.

- ℞. Olei gaultheriae or betulae (unofficial)  
Apply locally alone or dilute with olive oil 1-2 or 1-3.
- ℞. Acidi acetosalicylici (aspirin, unofficial) .5 gm.  
(grs. 8)  
In powder, capsule or mixture with acacia.
- ℞. Sodii salicylatis . . . . . grs. xv  
Sodii bicarbonatis . . . . . grs. xv  
Aquae menthae piperitae . . . . . ℥iii  
M. F., p. r. n.

**LUPUS.** Surgery, X-ray and radium, also tuberculin are used. There is no effective drug treatment.

Arsenous acid (arseni trioxidum) is sometimes used externally as a caustic. See Cancer.

**LYMPHOMA.** See also Leucemia, Hodgkin's Disease.

*Arsenic* internally and also by direct injection into tumors may prove of value.

- ℞. Arseni trioxidi . . . . . .002 gm. (1/30 gr.)  
In pill or solution after meals.
- ℞. Liquoris acidi arsenosi . . . . .2 mil. (3 minims)  
3-5 m. diluted, three times a day, after meals;  
gradually increased.
- ℞. Liquoris potassii arsenitis . . . . .2 mil. (3 minims)  
3-5 drops diluted three times a day after meals;  
gradually increased.

**MALARIA.** See also Anemia, Neuralgia, Neuritis.

*Quinine* is powerfully aetiotropic in this disease; it may be given in single or divided doses. Quinine best destroys the malarial parasite during its amoebic stage. As a rule 10-30 grs. are given daily for three days, then in smaller doses for the next two or three weeks. The aestevo







autumnal form of malaria requires 30–40 grs. of quinine in 24 hrs. Small doses of quinine act as an efficient prophylaxis., even 2 grs. t. i. d.

R. Quininae sulphatis, bisulphatis hydrochloridi  
(or other salt). Antimalarial average dose  
U. S. P. IX 1 gm. (15 grs.) daily.

Put in capsules, take this quantity in divided doses beginning about eight hours before the paroxysm. Or one capsule, grs. v, t. i. d.

Quinine is occasionally given in solution dissolved by means of dilute acids or given in mixtures with liquorice or yerba santa to disguise taste. Examples:

R. Quininae hydrochloridi.....grs. v  
Acidi hydrochlorici diluti or  
Acidi hydrobromici diluti.....mv.–xx  
Syrupi limonis  
Aquae aa. q. s.  
Sig. T. i. d. or p. r. n.

R. Quininae sulphatis.....gr. v  
Fluidextracti glycyrrhizae.....1/3  
Elixiris aurantii.....2/3  
M. F. Shake well before using. Take p. r. n.

Quinine is occasionally used hypodermically. The dihydrochloride or the hydrochloride of quinine and urea are used. They are both very soluble in water or normal salt solution. The average dose of both salts as prescribed by the U. S. P. IX revision is 1 gm. (15 grains) daily as antimalarial. Tonic dose .1 gm. (11/2 grs.).

*Arsenic* is used in malarial infections especially in obstinate cases and where there is cachexia. It appears to stimulate the blood making organs and metabolism and probably acts also aetiotropically.

R. Arseni trioxidi. .... .002 gm. (1/20 gr.)  
In pill or solution after meals,

R̄. *Liquoris acidi arsenosi*. . . . . .2℥mil. (3 minims)  
M. 3-5. T. i. d. after meals.

R̄. *Liquoris potassii arsenitis* . . . . .2 mil. (3 minims)  
As above.

*Quinine* + *Arsenic* is a frequent combination in chronic malaria; iron is often added.

R̄. *Quininae sulphatis* . . . . .gr. iss +  
*Arseni trioxidi* . . . . .gr. 1/30  
*Ferri reducti* . . . . .gr. i  
*Pulveris capsici* . . . . .gr. 1/4  
M. F. pill.

*Opium* has a distinct effect in some cases of malaria especially those of old standing.

R̄. *Opii pulveris*. . . . . .05 gm. (gr.i)  
In powder, pill or capsule.

R̄. *Extracti opii*. . . . . .03 gm. (1/2 gr.)  
In pill.

R̄. *Tincturae opii* . . . . . .5 mil. (8 minims)  
In flavored watery solution.

The antipyretics of the *Acetanilid*, *Antipyrine*, *Phenacetin* series have been used as substitutes for quinine in malaria but do not seem to have the specific action on the organism of malaria which is possessed by quinine.

A *Purgative* is often administered as a preliminary treatment. This purgative may be a vegetable, a saline or mercurial.

*Note*:—*Eucalyptus* which was at one time considered a specific is now known to be unreliable; it has no action beyond that of volatile oils. *Methylene blue* is in the same category as to specific action in malarial infection.

**MANIA.** See also delirium.

Central nerve depressants may be necessary. *Chloral*, *Opium*, *Bromides*.





- R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
In flavored solution, syrup or elixir.
- R̄. Tincturae opii . . . . . .5 mil. (8 minims)  
In flavored solution.
- R̄. Morphinae sulphatis or hydrochloridi .008 gm.  
(1/8 gr.)  
Hypodermically.
- R̄. Potassii or sodii bromidi . . . .1 gm. (15 grs.)  
In flavored solution.

The mania of a true psychosis is best treated in an institution; the wet pack and hot bath are much used.

**MARASMUS.** Infantile Atrophy.  
The cause must be treated.

**MEASLES.** There is no specific pharmacological treatment. Symptoms may require attention particularly Cough, Fever, Itching, Conjunctivitis, Rhinitis, etc. *Hexamethyleneamine* is given as a general prophylactic antiseptic. It has no specific action that is known in measles.

- R̄. Hexamethylenaminae . . . . . .25 gms. (4 grs.)  
Tablet or water always well diluted.

**MEAT POISONING** (Kreatoxismus). The treatment consists in emptying the bowel and treating symptoms (see Cholera Morbus).

**MENIERES DISEASE.** No rational pharmacological treatment is known for this disease. Suprarenal gland substance is used in certain cases but the treatment is empirical.

- R̄. Suprarenali sicci . . . . . .25 gm. (4 grs.)  
Powder, capsule or tablet.

**MENINGITIS CEREBROSPINAL.** There is no effective pharmacological treatment. Hydrotherapy and lumbar puncture may be useful.

*Hexamethylenamine* is used, and is eliminated in the cerebro spinal fluid. Its efficacy in this disease is much to be doubted.

R. Hexamethylenaminæ. . . . . .25 gms. (4 grs.)  
Tablet or solution.

Mercury, iodides, bromides, ergot and other drugs have been empirically used but none of them has apparently won universal confidence.

Flexner's bacteriolytic serum is generally regarded as the most effective treatment if used early. 30 c. c. of Flexner's serum is injected intrathecally after withdrawal of 50 c. c. of cerebrospinal fluid. The actual results of this treatment as in all serological therapeutics is open to doubt and dispute.

**MENORRHAGIA.** See Hemorrhage Uterine.

**MERCURIALISM.** See Poisoning by Mercury.

**METABOLISM** Diseases of. See Gout, Rheumatism, Diabetes.

**MIGRAINE.** See Headache.

**MORPHINISM.** Pharmacological treatment secondary and chiefly confined to symptomatic applications. Treatment, which is largely moral can only be successfully carried out in an institution; the withdrawal of the drug can then be successfully accomplished. The substitution of other narcotics must be avoided. To lessen the phenomena of abstinence, a mixture of Belladonna, Hyoscyamus and Xanthoxylum (Towne) is much used at the present time. The third ingredient is superfluous as it has no action. Atropine is the active principle of the other two. The treatment is still on trial.







**MOUTH.** See Stomatitis, Breath.

**MOUTH INFECTION.** See also Tooth Infection. The mouth requires to be kept scrupulously clean in health and in disease. Many antiseptics are used in the mouth, among which are Alcohol, Glycerine, Volatile oils.

R. Glycerini.....20%  
 Olei gaultheriae.....1/20%  
 Alcoholis.....50%  
 Aquae destillatae.....50%  
 Dilute some and use as mouth wash.

**MYXEDEMA.** Partial myxedema of adults is more common than formerly believed. The treatment is specific and consists of administering *Thyroid Gland* preparations.

R. Thyrodei sicci......1 gm. (1/2 grs.)  
 In capsule or tablet, begin with small dose and gradually increase if necessary. Treatment must be more or less continuous.

**NARCOTIC POISONING.** See Poisoning by Narcotics.

**NAUSEA.** See Vomiting.

**NEPHRITIS ACUTE.** See also Uremia.

General principles of treatment include particularly, absolute rest, eliminations by sweating and purging, suitable diet and care. *Sweating* is carried out by hot baths (air and water) and by packs.

*Purgation* is secured by salines and resin purgatives or combinations of these, particularly comp. jalap powder (see under Constipation for full list of drugs.)

Diuretic drugs are ordinarily avoided in acute nephritis. In acute exacerbations of chronic nephritis they are often given. Mildly acting diuretics are occasionally used with benefit. The so-called "Imperial Drink" so much used is an example. It contains Potassii bitartras or Cream of Tartar as follows;

Cream of tartar . . . . . 3i\*  
 Juice of 1/2 lemon  
 Water . . . . . Oi  
 As drink p. r. n.

**NEPHRITIS** Chronic. See also Uremia, Dropsy.

Arteriosclerosis and Syphilis are etiological factors to be considered. There is no effective pharmacological treatment; that is to say drug treatment can only be symptomatic.

In chronic nephritis the chief principles of treatment are to maintain adequate nutrition, at the same time putting limitations upon the work of the kidney. Uremia must be avoided. Proper diet is therefore essential and this consists mainly in restricting proteids as meats and broths also irritants as spices, alcohol, certain drugs, etc. Cardiac failure is another complication which must be guarded against. The pharmacological treatment, therefore, of chronic nephritis is of subsidiary importance and is principally reserved for emergencies. The chief accidents are the occurrence of Uremia, cardiac complications as Heart failure, Paroxysmal Tachycardia, Angina Pectoris, etc. (q. v.)

In chronic nephritis the *Nitrite* preparations are often prescribed to lower arterial tension. Indiscriminate attempts to lower pressure are not so much used since the compensatory nature of the symptom is appreciated.

R̄. Sodii nitritis. . . . . .06 gm. (1 gr.)  
 In tablet or solution.

R̄. Nitroglycerini or Trinitrini (unofficial) .0005  
 gm. (1/100 gr.)  
 In tablet form.  
 By mouth, p. r. n.

R̄. Spiritus glycerylis nitratis . . .05 mil. (1 minim)  
 In flavored solution or by drops if dose is to be increased.

\*Average dose U. S. P. IX 2 gms. (30 grs.)





Vegetable Purgatives are useful especially *Croton Oil*, *Jalap* or *Colocynth*. These drugs produce free watery evacuations.

- ℞. Olei tiglii . . . . . .05 mil. (1 minim)  
In pill with bread crumbs or on sugar or with  
olive oil.
- ℞. Resinae jalapae. . . . . .125 gm. (2 grs.)  
In pill (is contained in c. c. pills).
- ℞. Pulveris jalapae compositi. . . . .2 gms. (30 grs.)  
In powder or from spoon, p. r. n.
- ℞. Extracti colocynthidis. . . . . .015 gm. (1/4 gr.)  
In pill.
- ℞. Extracti colocynthidis compositi (colocynth,  
aloes, scammony). . . . . .25 gm. (4 grs.)  
In pill, p. r. n.

*Pilocarpine* in small doses lowers arterial tension by action on vagus terminations and increases elimination through diaphoresis (sympathetic stimulation). It must be used with care and only for short periods of time. It tends to prevent uremia.

- ℞. Pilocarpinae hydrochloridi or nitratis  
Average dose U. S. P. IX, by mouth .01 gm.  
(1/6 gr.), by hypodermic .005 gm. (1/12 gr.).  
For continuous administration gr. 1/30 is  
best dose.

*Pilocarpine* + *Nitrite* is a combination which may be used.

- ℞. Sodii nitritis . . . . . .gr. i  
Pilocarpini hydrochloridi . . . . .1/30 gr.  
Elixiris aurantii . . . . .q. s.  
M. F. P. r. n.

The Xanthin diuretics *Caffein*, *Theogromine*, *Theocin*, are exceedingly effective in renal cases with oedema; of these Theobromine and Theocin are most used.

R̄. Theobrominae sodio-salicylatis (Diuretin) 1 gm.  
(15 grs.)

In powder, taken in water q. 4 h.

R̄. Theophyllinae (Theocin) . . . . .25 gm. (grs. iv)  
In capsule, t. i. d., discontinued when effects are  
obtained.

**NERVOUS EXHAUSTION.** See also Debility, Neurasthen-  
ia.

*Caffeine* stimulates the brain cortex and is useful in col-  
lapse.

R̄. Caffeinae . . . . .15 gm. (2 1/2 grs.)  
In powder, tablet or in water, dissolved by aid  
of salicylate of sodium, or as effervescent  
powder.

R̄. Caffeinae citratae (50%) . . . . .3 gm. (5 grs.)  
In solution; by mouth.

R̄. Caffeinae citratae effervescentis (about 2%  
caffeine) 4 gm. (60 grs.)  
In solution; by mouth.

R̄. Caffeinae sodii benzoatis  
Average dose U. S. P. IX, by mouth .3 gm.  
(15 grs.); by hypodermic .2 gm. (3 grs.).  
Sig. Internally in capsule or flavored solution  
or by hypodermic injection, p. r. n.

An improvised effervescent compound can be made in  
the usual way in which the quantity of caffeine can be  
varied at will.







- R̄. Caffeinae citratae . . . . . grs. 2 1/2  
 Saccharated sodium bicarbonate  
 Saccharated tartaric acid . . . . . aa. q. s. ad ʒi  
 For effervescent solution, p. r. n.

**NERVOUSNESS.** See also Tremor, Chorea, Hysteria. Nervousness may be a symptom of many mental and physical disorders and the discovery of the cause will usually be necessary for intelligent treatment.

The *Bromides* in simple nervousness are efficient.

- R̄. Sodii bromidi . . . . . 1 gm. (15 grs.)

- R̄. Potassii bromidi . . . . . 1 gm. (15 grs.)

- R̄. Ammonii bromidi . . . . . 1 gm. (15 grs.)

The above drugs are administered singly or combined, always in watery solution, flavored if desired with volatile oil preparations (peppermint water).

They may also be given in effervescent form with *salis effervescentis* as follows:

- R̄. Caffeinae citratae . . . . . gr. v  
 Potassii bromidi . . . . . grs. xv  
 Salis effervescentis . . . . . q. s. ad ʒi  
 P. r. n.

In nervousness due to syphilis iodides are beneficial (See also Syphilis).

- R̄. Potassii iodidi . . . . . .3 gm. (5 grs.)

In dilute or concentrated watery solutions, always diluted when taken. Sodium or potassium carbonate are sometimes added to prevent decomposition but do not appear absolutely necessary.

**NEURALGIA-NEURITIS.** See also headache.

Correct errors of refraction, constipation. Examine

teeth. Look for Syphilis, Rheumatism, Anemia, Malaria, Debility (q. v.). Outdoor life and care in diet will be helpful. Neuralgia is one of our nosological terms like rheumatism, gout, angina, etc., which it is impossible to define since the precise elements of its connotation are unknown. It is however a necessary term and cannot be dispensed with until these factors are known. The term neuritis is perhaps a clearer concept but we are often unable to tell whether a pain in the neighborhood of a nerve or nerves is due to an actual inflammation or not. As in the case of various arthritides so in the various neuritides an infectious or toxic element often exists as the most important factor in the etiology. The original focus of "sub infection" as it is termed in our current nomenclature may exist in numerous and widely separated portions of the body. The teeth, the sinuses of the face, the middle ear, tonsil, gall bladder, appendix, seminal vesicles, uterus, may be mentioned as good examples of these foci. Chronic arthritis is always due to sub-infection. Perhaps chronic neuralgia-neuritis may be placed in the same category. Pharmacological treatment while more or less empirical is quite often gratifying in its results.

In neuralgia due to worry, anxiety or overwork the *Bromides* are often of benefits.

R̄. Potassii or sodii bromidi . . . . .1 gm. (15 grs.)  
In flavored solution.

R̄. Ammonii bromidi. . . . .1 gm. (15 grs.)  
Always in solution, taken well diluted, flavored  
if necessary with volatile oil preparations.

*Quinine* is used with good results especially in the periodic forms of neuralgia-neuritis.

R̄. Quininae sulphatis, hydrobromidi hydrochloridi  
.1 gm. (1 1/2 grs.)  
In pill, capsule, tablet, acid solution or with  
liquorice as:





- ℞. Quininae sulphatis . . . . . gr. iss  
 Fluidextracti glycyrrhizae . . . . . 1/3  
 Elixiris aromatici . . . . . 2/3  
 Dose, p. r. n.
- ℞. Elixiris ferri quininae et strychninae N. F. 4  
 mils. (3i)  
 Diluted with water when taken.
- ℞. Tincturae cinchonae . . . . . 4 mils. (3i)  
 In flavored solution.

Drugs of the analgesic-antipyretic group are often effective in relieving neuralgic pains: *Acetanilid*, *Phenacetin*, *Antipyrine*.

- ℞. Acetanilidi . . . . . .2 gm. (3 grs.)  
 In powder, capsule, or suspension with acacia.
- ℞. Acetphenetidini . . . . . .3 gms. (3 grs.)  
 In powder, capsule or acacia suspension.
- ℞. Antipyrinae . . . . . .3 gms. (3 grs.)  
 In flavored water solution.

Quinine + Antipyretic-Analgesic is a rather frequently used combination. It may be readily effected in capsule.

- ℞. Quininae sulphatis . . . . . gr. iss  
 Acetphenetidini . . . . . grs. v  
 Capsule, repeat p. r. n.

The *Salicylates* are used. They are of service perhaps, in early inflammatory cases.

- ℞. Acidi salicylici . . . . . .75 gm. (12 grs.)  
 Ft. in solution with borates or citrates to effect  
 solution or in capsules or tablets.
- ℞. Sodii salicylatis . . . . . 1 gm. (15 grs.)  
 Ft. in capsules or tablets, syrup, elixir, or flavored solution.

- R̄. Olei gaultheriae or betulae  
Locally applied, alone or mixed in olive oil 30–50% strength.

In neuralgia of a periodic character *Arsenic* is often used with benefit; the exact conditions under which it is useful are not accurately known.

- R̄. Arseni trioxidi. . . . . .002 gm. (1/30 gr.)  
Pill or solution.

- R̄. Liquoris acidi arsenosi 1% . . . .05–.5 (1–8 gr.)  
Three to five drops, t. i. d. in flavored solution or by drops if intended to be increased.

- R̄. Liquor potassii arsenitis (1%) .2 mil. (3 minims)  
As above.

*Aconite* may be employed externally, as tincture of aconite or as a 2% solution of the alkaloid aconitine in alcohol or 2% ointment may be used.

*Note:*—*Aconite* is of no service internally in neuralgia. When locally applied it first stimulates the peripheral terminations of sensory nerves especially those of common sensation. The stimulation finally passes into depression thus inducing a sense of numbness at the point of application. When poisonous doses have been taken internally numbness extends over the body. After therapeutic doses numbness is not produced.

*Veratrine* is used externally 4% ointment. Its action is produced similarly to that of aconite.

- R̄. Unguenti veratrinae 4%  
Locally applied.

- R̄. Oleati veratrinae 2%  
Locally applied.







The external use of aconite and veratrine in neuralgia does not appear to be as popular as formerly. Veratrine is extremely irritant to the eyes.

*Gelsemium* has been found to be of some service especially in trigeminus neuralgia; it probably acts by depressing the ganglion of the 5th nerve.

R̄. Tincturae gelsemii . . . . . .25 mil. (4 minims)  
In flavored solution.

R̄. Fluidextracti gelsemii . . . . .03 mil. (1/2 minim)  
In flavored solution.

The *Iodides* are valuable in neuralgia due to syphilis. (See also Syphilis.)

R̄. Potassii iodidi . . . . . .3 gm. (5 grs.)  
In concentrated or dilute solution, taken with considerable water or flavored.

#### Combinations:

It will be seen that the drugs frequently effective in neuralgia-neuritis are Bromides, Quinine, Acetanilid, Phenacetin, Antipyrin, Arsenic, Aconite, Veratrum and Gelsemium. The possible combinations of these drugs are exceedingly numerous but the student should practice conservatism here as elsewhere and seek to get results with limited drug combinations.

R̄. Quininae tannatis . . . . . grs. iii (.2 gm.)  
Acetanilidi . . . . . grs. iii  
Caffeinae sodio benzoatis . . . . . grs. v  
Pulveris aromatici . . . . . grs. ii-v  
M. F. one powder. Repeat as necessary.

Make a combination of Iodides + Bromide + Arsenic + Cinchona + Gelsemium.

Electricity (Galvanism) massage and hydrotherapy are sometimes beneficial.

**NEURALGIA TRIFACIAL.** See Neuralgia-neuritis.

This variety may sometimes require surgical intervention such as Alcohol injections into the various sensory branches or even excision of the sensory portion of the Gasserian Ganglion.

**NEURASTHENIA.** See also Psychasthenia.

Pharmacological treatment secondary and symptomatic.

*Note:*—The hypophosphites have been extensively used in neurasthenic states but are entirely irrational. They were formerly supposed to be oxidized in the tissues to phosphates, but this is incorrect, practically the whole amount given being eliminated unchanged in the urine. They have no more effect on nutrition than indifferent salts as chlorides. Hypophosphite of iron acts as an iron ion. The above is true also of the phosphates and glycerophosphates because the tissues are entirely incapable of building up phosphorus compounds from inorganic phosphates.

**NIGHT SWEATS.** Examine for tuberculosis.

*Atropin* is the most efficient drug to control sweating. It paralyses secretory nerve terminations.

R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
In tablet or flavored solution.

*Agaricin* is given to check excessive perspiration. Its physiological action seems similar to that of atropine.

R̄. Agaracini (unofficial) . . . . .015 gm. (1/4 gr.)  
In pill 5–6 hrs. before retiring.

*Camphoric Acid* is used in treating night sweats. The efficiency of this drug has lately been questioned upon experimental grounds.

R̄. Acidi camphorici. . . . .gr. xv  
In powder or capsules.





*Strychnine* is beneficial occasionally in excessive sweating on account of its vasoconstrictor effects.

- ℞. Strychninae nitratis or sulphatis .0015 gm. (1/40 gr.)  
In pill or solution or by hypodermic injection.
- ℞. Extracti nucis vomicae. . . . . .015 gm. (1/4 gr.)  
In pill, p. r. n.

Various combinations may be used of the above drugs, Atropine, Agaricin, Camphoric Acid and Strychnine.

- ℞. Strychninae sulphatis. . . . . gr. 1/40  
Extracti belladonnae foliorum . . . . . gr. 1/4  
Agaricini . . . . . gr. 1/4  
Acidi camphorici. . . . . gr. v  
In capsule or pill, take at bedtime.

*Note:*—Aromatic sulphuric acid so often vaunted as a remedy for night sweats has no effect.

**NIPPLES FISSURED.** A breast pump or shield may be necessary. Various local applications are used chief of which are silver nitrate (stick or strong solution, 20%), glycerite of tannin, compound tincture of benzoin.

**OBESITY.** Dietetic and Hygienic regulations are most essential. For details as to these consult special works.

*Thyroid Extract* is effective in certain cases particularly in so-called constitutional obesity where the obesity may be a function of hypothyroidism.

- ℞. Thyroidei sicci. . . . . .1 gm. (1 1/2 grs.)  
In capsule or tablet, carefully watched.

Large quantities of dilute solutions of *Purgative Salts* are of value. The natural mineral waters are much used as Apenta, Carlsbad, Pluto, etc. The effect of the sahnas is due in part to diminished absorption of fats and proteins

from the intestine and to diminution of body fluid; these waters contain .2-4% Na Cl. There is no effect upon metabolism.

R̄. Sodii sulphatis . . . . . 15 gms. (3iv)  
In saturated solution diluted or as effervescent powder.

R̄. Magnesii sulphatis . . . . . 15 gms. (3iv)  
As above.

R̄. Sodii phosphatis . . . . . 4 gm. (3i)  
In milk, flavored solution or with effervescent powder or as compound solution N. F. (dose 3ii).

R̄. Potassii et sodii tartratis (Rochelle) 10 gms.  
(3iiss).  
Take in solution or as Seidlitz powder. Pulvis effervescens compositus.

**OEDEMA.** See Dropsy.

**OPHTHALMIA.** See also Conjunctivitis.

In ophthalmia, especially of infectious form, a solution of *Silver Nitrate* 1% is extremely valuable. It is used on new born infants as a prophylactic measure. After the application the eye should be washed out with salt solution.

R̄. Argenti nitratis . . . . . 1-2%  
One drop in eye of new born to prevent ophthalmia. Wash out with salt solution.

Various organic compounds of silver are used but are of secondary importance.

**ORCHITIS.** See also Epididymitis. (The so-called "swelled testicle" is always an epididymitis.)

Often Gonorrhoeal (q. v.), may be due to Mumps.  
Symptom pain may require relief.







**OSTEOMALACIA.** A solution of *Phosphorus* in cod liver oil may be prescribed and 1–5 mg. of phosphorus taken each day. After phosphorus administration more lime is retained than usual.

R̄. Olei phosphorati N. F. a 1% solution in almond oil and ether .05 mil. (1 minim) must be freshly prepared.

R̄. Pilulae phosphori each . . .0006 gm. (1/100 gr.)  
Dose, one pill.

*Arsenic* is used in osteomalacia because of its effects upon metabolism.

R̄. Arseni trioxidi .001–.005 gm. (1/60–1/12 gr.)  
In pill or flavored solution.

R̄. Liquoris potassii arsenitis . . .2 mils. (3 minims)  
3–5 g iis., t. i. d. Gradually increased.

R̄. Sodii arsenitis. . . . . .003 gm. (1/12 gr.)  
In pill or flavored solution.

**OTITIS MEDIA.** See Ear Ache.

**PAIN.** See also Headache, Neuralgia, Sprain, Calculus, Colic, etc.

*Opium* internally is indicated in severe pain. The local application of opium for pain is illogical because neither opium nor morphine has any local effect upon sensory nerves. The analgesic effect of opium is exclusively a function of its action upon the cerebrum.

R̄. Morphinae sulphatis or hydrochloridi .008 gm.  
(1/8 gr.)  
In tablet, pill or hypodermically.

R̄. Codeinae sulphatis or phosphatis .03 gm. (1/2 gr.)  
In pill, powder or capsule.

R̄. Extracti opii. . . . . .03 gm. (1/2 gr.)  
In pill.

R̄. Tincturae opii or T. O. deodorati 5 mils. (8  
minims)  
In flavored solution.

The most effective method known for the relief of pain is the hypodermic injection of *Morphine* and when the pain is sufficiently severe it can only be so relieved. There is no doubt however that the tendency to give morphine indiscriminately is injudicious and should be regarded as a *dernier ressort* and especially, should frequent repetition be avoided since this is the most prolific cause of habit formation.

Various local applications are used. Turpentine Stupes or liniment may be used with good effect. The turpentine stupe is made by dropping flannel in hot water, wringing it dry and dropping warm turpentine oil upon it.

*Aconite* applied externally benumbs the sensory nerve endings. The action of aconitine consists in a slight primary stimulation followed by depression of the sensory nerve terminations.

R̄. Tincturae aconiti  
Apply locally.

R̄. Aconitinae. . . . . .2%  
Olei olivae  
Apply locally.

*Belladonna* is used as a local anodyne. The action is weak compared to that of cocaine and is less used than formerly. It is used for this purpose in the form of:

R̄. Linimenti belladonnae (camphor)  
Apply locally.

R̄. Emplastri belladonnae  
Apply locally.





R̄. Unguenti belladonnae  
Apply locally.

A stream of carbonic acid directed against the skin induces intense cold and produces local anaesthesia, thus preventing the pain of minor surgical operations. Ether or ethyl chloride sprayed on the affected part causes local anaesthesia. The great volatility of these substances causes rapid evaporation with production of cold; the cold produces paralysis of the peripheral terminations of sensory nerves. The method is only suitable for very short operations especially small incisions.

The chief local anesthetic is *Cocaine* which acts by paralyzing the peripheral terminations of certain sensory nerves especially the pain filaments. It must be brought in direct contact, hence does not act through the skin.

R̄. Cocainae hydrochloridi. . . . . .015 gm. (1/4 gr.)  
In powder or tablet. Locally in solution 1–2%  
or less or by hypodermic injection; in infiltration  
anesthesia .1–.2% solution.

The chief substitutes for cocaine are *Eucaine* and *Novocaine*. They are used similarly to cocaine.

The chief general anaesthetics are *Ether* and *Chloroform* of which the first should be preferred on account of its greater safety.

**PALPITATION.** See also *Tachycardia paroxysmal*. May be an indication of functional or organic Heart Disease (q. v.). If the heart action is irregular the precise nature of the arrhythmia should be ascertained.

The *Bromides* are used.

R̄. Potassii or sodii bromidi . . . . .1 gm. (15 grs.)  
In solution always diluted when taken, flavored  
with syrup and volatile oil preparations.

Reflex stimulation used occasionally may benefit, as *Whiskey*, *Brandy*, *Aromatic Spirit of Ammonia* (3ss diluted), *Compound Spirit of Ether* (3ss diluted), etc.

**PARALYSIS and PARESIS.** Much can be done even in old paralytics by scientific reeducation. Drugs are of secondary value.

*Strychnine* is beneficial as long as there is no distinct lesion of the central nervous axis. There is no absolute certainty in results—sphincter paralyses are included, also gastric atony.

R̄. *Strychninae nitratis, sulphatis, hydrochloridi*  
.0015 gm. (1/40 gr.)

In tablet, solution or hypodermic injection.

Doses as high as .01 (1/6 gr.) are occasionally given subcutaneously or by mouth. Such doses cannot be repeated the same day. Usually a small dose is given and gradually increased up to 1/6 gr., then a pause of 10–12 days allowed in treatment.

R̄. *Tincturae nucis vomicae*. . . . .5 mil. (8 minims)  
In flavored solution.

R̄. *Extracti nucis vomicae*. . . . .015 gm. (1/4 gr.)  
As high as .10 c. c. (gr. 2) a day are given in pill.

### **PARALYSIS AGITANS.**

*Scopolamine (Hyoscine)* is often used and may check but will not cure the tremor.

R̄. *Scopolaminae hydrobromidi* .0003 gm. (1/200 gr.)

In tablet or solution.

Pituitary gland (gr. ii) is given empirically.

**PARESIS.** See Syphilis, Tabes.

**PAROTITIS.** No pharmacological treatment except for symptoms.

### **PEDICULOSIS.**

P. Capitis:

Kerosene oil and olive oil equal parts to remove nits.

*Mercurial* preparations as antiparasitic.







R̄. Hydrargyri chloridi corrosivi 1–5000  
Aquae destillatae or aromatic acetic acid  
Apply locally.

R̄. Unguenti hydrargyri ammoniati 10–20%  
Apply locally.

**P. Corporis:**

Wash frequently and bake clothes. Use bichloride lotion as above or *Sulphur*.

R̄. Sulphuris 20%  
Lani or adipis benzoinati q. s.  
Ointment; for local application.

**P. Pubis:**

*Mercurial* lotion or unguentum is used.

*Cocculus Indicus* (Fish berries) is used; effect due to Picrotoxin.

R̄. Pulveris cocculi indici . . . . . 10%  
Hydrargyri ammoniati . . . . . 5–10%  
Ungt. aquæ rosae.  
M. F. Unguentum, locally.

**PEMPHIGUS.** See Skin Diseases.

**PERIOSTITIS.** Treatment surgical unless syphilitic (q. v.).

**PERITONITIS.** Treat the cause; surgical intervention often necessary as in appendicitis. Locally, ice bag is used; salines, enemas.

*Opium* is the chief drug. Only to be used after diagnosis is carefully determined.

For opium preparations see under caption Pain.

**PERNICIOUS ANEMIA.** See Anemia.

**PERSPIRATION, Excessive.** See also Night Sweats Bromidrosis.

*Atropine* inhibits the action of the sweat glands.

- R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
Tablet or solution.

In dilute solutions the *acids* are applied to the skin to lessen excessive sweating.

- R̄. Acidi sulphurici diluti. . . . .10%  
Locally.

- R̄. Acidi nitrici diluti. . . . .10%  
Locally.

- R̄. Acidi hydrochlorici diluti. . . . .10%  
Locally.

The use of the mineral acids internally for sweating is not based on any pharmacological data and the clinical evidence appears to be negative.

*Salicylic acid* is applied locally; it softens epithelium.

- R̄. Acidi salicylici. . . . .10–20%  
Inert powder (talc)  
Dusting powder.

- R̄. Acidi salicylici. . . . .2–5%  
Unguentum (petrolatum)  
Apply locally.

*Tannic Acid* is used locally to precipitate proteids and harden the skin.

- R̄. Acidi tannici. . . . .5%  
Inert powder.  
Apply locally.

- R̄. Glyceriti acidi tannici  
Apply locally.

- R̄. Collodii styptici  
Locally.





**PERTUSSIS.** See Whooping Cough.

**PHARYNGITIS.** See Sore Throat, Tonsilitis.

**PHOSPHATURIA.** See also Calculus, Cystitis.

*Hexamethylenamine* is effective in diminishing the precipitation of insoluble phosphates in the urine.

R̄. Hexamethylenaminae. . . . . .25 gm. (4 gr.)  
In tablet, taken with glass of water.

**PITYRIASIS.** Dandruff.

A great variety of antiseptic and irritant substances are employed for cleansing purposes and to produce hyperemia and stimulate nutrition of the scalp. There is no special superiority in any of these. A few may be mentioned: Alcohol, Resorcin, Phenol, Salicylic Acid, Volatile Oils, Iodine, Ammonia.

For formulae see under Alopecia.

A simple application to remove the scales is:

R̄. Sodii biboratis. . . . . .2-4%  
Glycerini. . . . . .10%  
Aquae. . . . . .q. s.

Shake well and apply, t. i. d.

R̄. Resorcinol. . . . . .1-2%  
Alcohol. . . . . .25%  
Aquae. . . . . .q. s.  
Shake and apply, b. i. d.

**PLAGUE.** Very fatal. No pharmacological treatment. Prophylactic methods are more successful consisting in destruction of plague bearing animals (rodents) and use of Hoffkine's serum. Results of serum treatment sub judice.

See also Effusions.

**PLEURISY.** Pain often relieved by strapping. Often tubercular. May require paracentesis.

The use of *Mercurij* in pleurisy, meningitis and pericarditis is frequent but must be regarded as an empirical treatment of debatable value.

℞. Hydrargyri chloridi mitis  
Average alterative dose U. S. P. IX. .015 gm.  
(1/4 gr.)  
In pill or powder.

℞. Hydrargyri cum cretae . . . . . .25 gm. (4 grs.)  
In powder or capsule.

**PLEURODYNIA.** See Neuralgia-neuritis; Pleurisy.

**PNEUMONIA.** Lobar. There is no specific treatment for the disease. The symptomatic treatment includes especial attention to the following: Fever, Cough, Dyspnoea, Cyanosis and Heart Weakness (q. v.).

*Note:*—Quinine and digitalis have been used systematically by some but are generally regarded as ineffective except when symptomatically indicated. Serological methods of treating pneumonia have failed.

**POISONING.** See also Morphinism, Cocainism, Alcoholism.

Acid Poisoning:

In corrosive acid poisoning, the *Alkaline Carbonates* may be given as antidotes. Magnesia is useful.

℞. Potassii carbonatis . . . . .1 gm. (15 grs.)

℞. Sodii carbonatis monohydrati . . .25 gm. (4 grs.)  
Ad libitum in plenty of water.

℞. Magnesii carbonatis . . . . .3 gms. (45 grs.)  
in water.







In emergency, whiting, chalk, wall plaster or soap may be used for alkali.

Alkali poisoning:

In alkaline poisoning *Acids* are the natural treatment, preferably the organic acids, as Acetic acid in the form of vinegar, or citric acid in lime or lemon juice. Tartaric acid 2 g. to 500 c. c. (℥ss-oi.) may be used.

Irritant poisoning:

*Demulcents* are of value especially milk and white of egg, also olive oil.

In Arsenic poisoning, freshly prepared magnesia is recommended to form an insoluble precipitate in the stomach.

*Note:*—The classic iron antidote for arsenic, magma ferri hydratis has been found experimentally to be ineffective. Repeated and prolonged stomach washing is the only rational and effective treatment for arsenic poisoning.

In chlorine poisoning the *Alkalies* are indicated to neutralize the acid formed.

℞. Potassii carbonatis . . . . . 1 gm. (15 grs.)  
or  
Sodii carbonatis monohydrati . . . . . 25 gm. (4 grs.)  
To be taken diluted and repeated as often as  
necessary.

℞. Magnesii carbonatis . . . . . 3 gms. (45 grs.)  
To be taken diluted and repeated as often as  
necessary.

Chlorine fumes when inhaled are best neutralized by the cautious application of *Ammonia* vapor.

Heavy metals: In metallic poisoning, *Tannic Acid* is used to produce precipitation of the metal in the stomach; the tannate formed however, must be removed immediately otherwise it will be absorbed in the stomach.

- R̄. Acidi tannici. . . . . .5 gm. (8 grs.)  
Repeated ad libitum in watery solution.

Tannic acid may be administered as strong tea.

In Oxalate poisoning *Lime* preparations are indicated to form insoluble calcium oxalate.

- R̄. Liquoris calcis. . . . .15 mls (3iv)  
Ad libitum.

- R̄. Calcii carbonatis precipitati (chalk) 1 gm.  
(15 grs.)  
Ad libitum.

In Nitrate of Silver poisoning, solutions of *Sodium Chloride* (common salt) arrest the action by forming insoluble silver chloride.

Narcotic poisoning:

*Atropine* is effective in poisoning from narcotic drugs, especially opium.

- R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
Usually gr. 1/40 given hypodermically and  
not repeated.

*Caffeine* stimulates failing respiration, and is an ideal cerebral stimulant because of the absence of secondary depression. It may be conveniently given as strong coffee.

- R̄. Caffeinae . . . . .15 gm. (2 1/2 grs.)  
In capsule or powder or preferably dissolved by  
addition of sodium salicylate or benzoate.

*Strychnine* is physiologically indicated especially in poisoning by alcohol and chloral (methane narcotics). It must be used carefully because of slow elimination and tendency to secondary depression.





R̄. Strychninae sulphatis or nitratis .0015 gm.  
(1/40 gr.)  
Hypodermically, p. r. n.

**POLIOMYELITIS** Acute Infantile Paralysis.

There is no effective pharmacological treatment. Hexamethylenetetramine is used; it is eliminated in the cerebrospinal fluid.

R̄. Hexamethylenaminae. . . . . .25 gm. (4 grs.)  
Powder, tablet or solution. Results very doubtful.

**PRICKLY HEAT.** Wear linen or silk, discontinue soap. Diminish fluid intake. The symptom Itching requires relief (q. v.)

**PROSTATITIS.** Chronic prostatitis and prostatic hypertrophy often demand surgical treatment.

*Opium* may be indicated for pain (q. v.).

*Belladonna* may be useful to diminish vesical irritability. See Cystitis.

The *Alkaline Carbonates* or bicarbonates are used to diminish acidity. (v. Hyperacidity.)

A.. the above drugs may be combined *i. e.* *Opium* + *Belladonna* + *Alkali*:

R̄. Morphinae sulphatis. . . . . gr. 1/8  
Tincturae belladonnae. . . . . m. xii  
Potassii citratis. . . . . grs. xv  
Syrupi acidi citrici  
Aquae menthae piperitae q. s.  
P. r. n.

**PRURITIS.** See also Itching.

P. Ani. Treat ulcer, fissure, worms. (See also Worms, Fissure of Anus.)

Protectives, astringents, antiseptics, and local anesthetics are used.

P. Vulvae. Examine urine for sugar (see Itching). Treatment same as above.

**PSORIASIS.** *Pyrogallol* applied as an ointment, is efficacious 5–20%. Dangerous if applied to large surfaces; in these cases *Chrysarobin* is used. Other drugs are *Ammoniated Mercury*, *Phenol* and *Balsam Peru*.

- R̄. *Pyrogallol* 5–20%  
*Petrolati*  
 Ointment, apply locally, it stains clothing.
- R̄. *Chrysarobini* 4%  
*Petrolati*  
 M. F. unguentum.
- R̄. *Chrysarobini* 10%  
 Solution of gutta percha.  
 Sig. Apply at night with camel's hair brush.
- R̄. *Hydrargyri ammoniati* . . . . . 2%  
*Phenolis* . . . . . 4%  
*Balsami peruviani* . . . . . 4%  
*Petrolati albi*  
 Apply at night by rubbing.

*Arsenic* is used internally on empirical grounds; the clinical evidence seems favorable.

Improvement or complete recovery accompanies treatment of psoriasis, chronic eczema and lichen ruber with arsenic; advisable only in chronic forms. Beware of intolerance.

- R̄. *Arseni trioxidi* . . . . . .002 gm. (1/30 gr.)  
 Pill or solution after meals.
- R̄. *Liquoris acidi arsenosi* . . . . .2 mil. (3 minims)  
 Taken diluted and gradually increased.
- R̄. *Liquoris potassii arsenitis* . . .2 mil. (3 minims)  
 3–5 drops after meals.
- R̄. *Sodii arsenitis* . . . . . .005 gm. (1/12 gr.)







**PUERPERAL SEPSIS.** See also Septicemia.

The treatment may be surgical. There is no reliable chemotherapy.

*Streptococcus vaccine* is much used, results doubtful.

*Antistreptococcus* serums seems to have been practically abandoned at present.

**PURPURA.** There is no effective pharmacological treatment. Many drugs are used empirically particularly, Iron, Arsenic, Turpentine, Strychnine, Opium. Results doubtful.

*Note:*—Calcium salts ineffective.

**PYORRHOEA ALVEOLARIS.** Treatment principally dental and surgical; bacteria are somewhat popular at present but the best observers have failed to obtain satisfactory results.

When due to *Amoeba* which seems rarely the case, Emetine hydrochloride is recommended by some recent observers. It is used hypodermically in 1/2 gr. doses gradually increased to 4 grs., also injected locally in 1/2% solution into the pyorrhoea pockets. Ordinary antiseptic and surgical treatment is best.

**RELAPSING FEVER.** *Salvarsan* (606) is very effective. It is regarded by many as absolutely specific. Dose .6 gm. intravenously. (For details see Syphilis.)

Treatment by sera is generally regarded as ineffective.

The symptoms, Fever, Diarrhoea, Pain and Collapse may require treatment.

**RESPIRATORY DISORDERS.** See Cough, Dyspnoea, Pneumonia, etc.

**RETENTION OF URINE.** May be associated with incontinence. The treatment is chiefly surgical.

The symptoms which may require treatment by drugs are practically those of Cystitis (q. v.).

**RHEUMATISM ACUTE.**—Acute rheumatic fever.

*Salicylic Acid* seems to have an almost specific action. Usually best administered in the form of *Aspirin*, *Sodium Salicylate* or *Salol*.

- ℞. Acidi salicylici . . . . . .75 gm. (12 grs.)  
In capsule or tablet; not much used.
- ℞. Sodii salicylatis. . . . . .1 gm. (15 grs.)  
In capsule, tablet, or dissolved in flavored solution usually combined with equal parts of sodium bicarbonate to diminish urinary acidity. The dose should be high at first, gradually diminished and long continued.
- ℞. Sodii salicylatis. . . . . .gr. xv  
Sodii bicarbonatis. . . . . .gr. xv  
Aquae menthae piperitae . . . . .3i–3ii  
M. F. Diluted, taken q. 2 h. carefully increased or diminished as required and continued for a month after symptoms have abated.
- ℞. Phenylis salicylatis (salol) . . . . .3 gm. (5 grs.)  
In powder or capsule.
- ℞. Acidi acetosalicylici (aspirin) unofficial .5 gm. (8 grs.)  
In capsule; or in mixture with acacia as follows:
- ℞. Acidi diacetylsalicylici (aspirin) . . . . .grs. viii  
Acacia . . . . .q. s.  
Syrupi aurantii . . . . .1/2  
Aquæ chloroformi . . . . .1/2  
Shake well.

*The Antipyretic Series*, Acetanilid, Antipyrine, Phenacetin, have been used as substitutes for salicylates but do not equal them. The substitutes most used have been Malakine and Salipyrine, in both of which Salicylic





acid ions are set free. They have no marked advantage over the plain salicylates.

Chronic Rhumatism (see also arthritis).

In chronic forms of rheumatism *Arsenic* is often valuable.

R̄. Arseni trioxidi. . . . . .002 gm. (1/30 gr.)  
In pill or solution, p. r. n.

R̄. Liquoris acidi arsenosi. . . . .2 mil. (3 minims)  
3-5 drops after meals, gradually increased.

R̄. Liquoris potassii arsenitis . . . . .2 mil (3 minims)  
As above.

R̄. Sodii arsenatis. . . . . .005 gm. (1/12 gr.)  
In pill or solution, t. i. d.

*The Iodides* are sometimes efficacious in chronic rheumatism (especially syphilitic).

R̄. Potassii iodidi . . . . . .3 gm. (5 grs.)  
In watery solution, flavored if necessary. Sodium or potassium carbonate may be added to prevent decomposition. Always look out for signs of intolerance when giving iodides.

*Arsenic* + *Iodides* is a combination sometimes given.

R̄. Potassii iodidi . . . . . .grs. xv  
Liquoris potassii arsenitis . . . . .m. iii  
Elixir aurantii . . . . .3i  
Sig. Begin with less than 3i dose and gradually increase.

In chronic gout and rheumatism the *Alkalies* are considerably employed and with some benefit in certain cases. Perhaps they relieve acidosis.

R̄. Potassii carbonatis. . . . . 1 gm. (15 grs.)  
 or  
 Sodii carbonatis monohydrati . . .25 gm. (4 grs.)  
 In water or flavored solution.

R̄. Potassii or sodii bicarbonatis. . .1 gm. (15 grs.)  
 In water or flavored solution.

Turpentine "stupes" and various counter-irritant liniments are used, locally applied to the painful parts.

R̄. Linimenti terebinthinae.  
 Local application.

The "stupe" is made by dipping flannel in hot water, wringing dry and dropping on warm turpentine oil. It is applied while hot and kept covered.

Other local anodynes or counter-irritants are often used, particularly, *Menthol*, *Methyl Salicylate* and *Iodine*.

R̄. Mentholis. . . . . 2-5%  
 Methylis salicylatis. . . . . 10-20%  
 Alcoholis. . . . . 15  
 Glycerini . . . . . 15  
 Olei olivae q. s. ad . . . . . 100  
 Solution; apply with rubbing.

R̄. Mentholis. . . . . 5  
 Methylis salicylatis. . . . . 5  
 Adipis lanae. . . . . 30  
 Cerae albae . . . . . 10  
 Paraffini . . . . . 10  
 Apply with massage.

*Iodine* is applied locally to induce absorption of the exudates. Its action is apparently that of counter-irritant. Iodine has always been a favorite local application but particularly so at present when it is regarded as an effective skin disinfectant.





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- R̄. Tincturae iodi (7%)  
Local application.

Remember that tincture of iodine becomes stronger as it is allowed to evaporate. Furthermore, if its use is prolonged or if it is covered with moist or impermeable dressing it will blister.

- R̄. Liquoris iodi compositi (5% iodine + 10% KI.  
sol.)  
Locally.

- R̄. Unguenti iodi.....4%  
Locally.

**RHEUMATOID ARTHRITIS.** See Arthritis.

**RHINITIS.** See Catarrh.

**RICKETS.** Good diet is essential—milk, cream, eggs, raw meat juice, good hygiene.

*Phosphorus* is used; it acts apparently by accelerating calcium fixation in the bones.

- R̄. Phosphori. .... .0005 gm. (1/120 gr.)  
In pill or in cod liver oil.

- R̄. Olei phosphorati N. F. 1% solution in almond  
oil and ether .05 mil. (1 minim)  
Should be freshly prepared.

*Arsenic* is often prescribed. Arsenic appears to effect particularly the medullary osseous metabolism.

- R̄. Liquoris acidi arsenosi. .... .2 mil. (3 minims)  
In pill or solution, t. i. d.

- R̄. Liquoris potassii arsenitis .. .2 mil. (3 minims)  
T. i. d.

**RINGWORM.** Tinea Trychophytosis.

Favorite drugs are *Mercury*, *Iodine* and *Sulphur*. They destroy the parasite.

R̄. Hydrargyri chloridi corrosivi . . . . . 1/5%  
Glycerini . . . . . 10%

Aquæ

Shake and rub well into lesion twice daily.

R̄. Unguenti hydrargyri ammoniati

Adipis benzoinati . . . . . aa.

Apply twice daily.

**SALIVATION.** Treat cause as stomatitis, pregnancy, neurosis, mercurialism.

*Atropine* is of service. The drug paralyses secretory nerve terminations.

R̄. Atropinae sulphatis. . . . . .0005 gm. (1/120 gr.)  
In tablet or solution.

**SARCINAE VENTRICULI.** Wash out stomach. Certain antiseptics are used, as Salol and Beta Naphthol-Benzozate.

R̄. Phenylis salicylatis (salol) . . . . .3 gm. (5 grs.)  
Powder or capsule.

R̄. Betanaphthol . . . . . .25 gm. (4 gr.)  
In powder or capsule not much used on account of burning taste.

R̄. Betanaphtholis benzoatis (unofficial) .25 gm.  
(4 gr.)  
In powder, p. r. n. This compound is tasteless.

**SCABIES.** Disinfect linen with high pressure steam.

*Sulphur* is used in the form of ointment. Sulphides are set free which kill the parasite.







- ℞. Sulphuris.....15  
 Adipis benzoinati.....100  
 Apply locally. This is practically unguentum  
 sulphuris (U. S. P.).

*Balsam Peru* and *Benzoin* are much used in scabies.  
 The benzoic acid set free kills the acarus.

- ℞. Balsami Peruviani.....q. s.  
 Externally.

- ℞. Balsami Peruviani.....20–40%  
 Alcoholis  
 Apply locally.

*Mercurials* as Metallic Mercury and Ammoniated Mercury are often used.

- ℞. Unguenti hydrargyri (about 30% Hg.) q. s.  
 Use locally.

- ℞. Hydrargyri ammoniati.....10  
 Petrolati.....50  
 Adipis lanæ hydrosi. ....40  
 M. F. Use locally. (A 10% ointment.)

**SCARLET FEVER.** There is no specific pharmacologic treatment. The symptoms Fever, Pharyngitis, Otitis, Lymphangitis may require treatment. As also Nephritis, Anemia and Rheumatism.

*Note:*—The treatment by sera has not proven successful.

**SCIATICA.** See also Rheumatism, Neuralgia-Neuritis. Turpentine preparations are often used as counter-irritant.

- ℞. Linimenti terebinthinae  
 Apply locally.

**SEA SICKNESS.** See under Vomiting, Nausea.

**SEPTICEMIA SEPTICOPYEMIA.** Pharmacological treatment unsatisfactory. Plenty of water by mouth and saline enemata are usually given.

*Hexamethylenamine* is used as a general antiseptic and is rational, but results are not known to be brilliant.

R̄. Hexamethylenaminæ . . . . . .25 gms. (4 grs.)  
Taken in tablet or capsule with water.

Inunctions of colloid silver (also rectal and intravenous injections) have been much employed but results are not brilliant.

R̄. Unguentum Crede q. s.  
Apply locally.

*Note:*—Eucalyptus was once considered useful, now known to be ineffective.

The results obtained by the use of Antistreptococcus serum are not brilliant. The problem of treating these conditions of general sepsis may perhaps be solved in the future by developments in chemotherapy. The only treatment at present is purely symptomatic.

**SHOCK.** Often relieved by the internal administration of strong *Alcohol* preparations such as brandy or whiskey. The action produced is a reflex stimulation of the medullary centres. The hypodermic injection of these substances in shock is not very rational since they belong to the methane narcotic series and their action when developed is depressing. Many pharmacologists believe that there is a stage of primary stimulation of the medullary centres but even they agree that this stage is short and evanescent. It is more rational to use medullary stimulants if stimulation of the medulla is what is desired. The pathology of shock is obscure however and its treatment is unsettled.





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*Adrenalin* (unofficial)\* is effective in shock following hemorrhage, surgical operations, and anaesthetics, provided the drug is administered intravenously. It then acts by stimulating the peripheral terminations of the sympathetic nerves distributed to the blood vessels and heart, raising the blood pressure and increasing the heart contractions. By mouth it has absolutely no such effect because the aminopyrocatechin (adrenalin) is destroyed. Hypodermically a similar fate awaits it except when injected in large and dangerous (uncertain) amounts into the lumbar muscles.

R̄. *Adrenalini hydrochloridi* (unofficial) dose 1/2 mg. .005 (gr. 1/120).

This amount is obtained by using 1/2 c. c. of the 1 to 1000 solution. It must be used intravenously in physiological salt solution.

R̄. *Suprarenali sicci*. . . . . .25 gm. (gr. 4)  
Internally.

*Note*:—Nitroglycerin and Amyl Nitrite have been much employed as stimulants in shock but a casual examination of the action of these substances shows how irrational is their use. The heart is already depressed and the arterial tension excessively low and their use could only tend to accentuate these conditions. The medullary centres are ischemic and to lower still further the blood pressure by nitrites could only increase the bulbar anemia and further jeopardize the respirations. Recovery after these drugs is not owing to but in spite of their use.

*Camphor* is used in shock. Internally the spirit is used to produce reflex medullary stimulation (v. s. under alcohol). Camphor is only slowly absorbed when given internally or hypodermatically. After its absorption its

\*A proprietary 1-1000 solution of suprarenal gland. Extemporaneous solutions may be made of the official gland (*Suprarenalum siccum*)







*Alum* in (1%) solution is applied for its astringent effect under similar circumstances.

*Mercury* in the form of ointment of ammoniated mercury, yellow oxide or red oxide, etc., is used in the treatment of skin diseases especially of syphilitic origin. (See Syphilis.)

R̄. Unguenti hydrargyri (1/2 metallic Hg.)  
Apply locally.

R̄. Oleati hydrargyri  
Apply locally.

R̄. Unguenti hydrargyri ammoniati (10%)  
Apply locally.

R̄. Unguenti hydrargyri oxidi flavi or rubri (10%)  
Apply locally.

*Ichthyol* is used as an ointment in various skin diseases. Its action depends upon sulphur.

R̄. Ichthyolis  
Petrolati . . . . . aa  
Ointment, apply locally.

*Tar* applied in the form of ointment is often useful where a stimulating antiseptic is required as in chronic eczema.

R̄. Unguenti picis liquidæ  
Apply locally.

*Balsam of Peru* and *Benzoin* are widely used as local applications in parasitic and scaly skin diseases.

R̄. Balsami Peruviani  
Apply externally alone or in alcoholic solution  
(20–40%)

- R̄. Tincturae benzoini compositi  
Apply locally.

*Camphor* as spirit or liniment is used for its stimulating effect in chronic skin diseases especially where there is itching.

- R̄. Spiritus camphorae  
Apply locally.

- R̄. Linimenti camphorae (camphorated oil)  
Apply locally.

**SMALL POX.** Prophylactic vaccination is highly important. Vaccination is said to be effective also in the incubative period of the disease. After the disease is developed there is no rational pharmacological treatment. Symptoms are to be treated as required.

**SNAKE BITES.** Enormous quantities of whiskey or brandy have been administered, but it is extremely doubtful whether this treatment is of any value.

The application of tourniquet and proper surgical treatment are indicated.

**SORE THROAT** (Pharyngitis). See also Tonsilitis.

*Potassium Chlorate* is used in irritable conditions of the mouth or throat, especially when this condition is due to mercury.

The chlorates are only of value locally and should not be given internally on account of the danger of poisoning.

- R̄. Potassii chloratis . . . . . 2-4% solution ..  
Used as mouth wash.

- R̄. Trochisci potassii chloratis  
Saliva should not be swallowed.

*Nitrate of Silver* or *Iodine* in early stages may abort when carefully applied to the inflamed mucosa.







- ℞. Argenti nitratis . . . . . 2.5–5%  
 Aquae destillatae . . . . . 25  
 Apply locally on swab.

- ℞. Liquoris iodi compositi (Lugol's sol.) q. s.  
 Apply locally.

*Alum* is used as an astringent gargle.

- ℞. Aluminis . . . . . 1–5% solution  
 Applied locally.

*Cubeb* lozenges are sucked in relaxed sore throat; the pungent stimulation relieves by producing a physiological hyperemia.

- ℞. Trochisci cubebae  
 Dissolve in mouth.

The *Salicylates* are given internally and are undoubtedly effective in many forms of sore throat.

- ℞. Acidi acetosalicylici (aspirin) .5 gm. (8 grs.)  
 In capsule or acacia mixture.

- ℞. Sodii salicylatis . . . . . 1 gm. (15 grs.)  
 In capsule or flavored solution.

See under Tonsilitis for details of administration of salicylates and appropriate combinations.)

**SPASMS.** See also Convulsions.

*Atropine* is useful in relaxing the spasms of involuntary muscles of the ureters, bile-duct, etc. It acts by paralyzing neuro-muscular receptors.

- ℞. Atropinae sulphatis . . . . .0005 gm. (1/120 gr.)  
 In tablet solution or by hypodermic injection.

**SPERMATORRHOEA.** See Emissions Nocturnal.

**SPLENIC ENLARGEMENT.** See Malaria, Banti's Disease.

**SPLENOMEGALY TROPICAL** (Dum Dum fever).

*Quinine* reduces the fever. (For details of administration of quinine, see Malaria.)

Anemia requires treatment (q. v.).

**SPRAINS.** See also Bruises.

Hot wet applications applied with pressure relieve the pain.

*Camphor* is used externally as a rubefacient in cases of sprain.

R̄. Spiritus camphorae  
Apply locally.

R̄. Linimenti camphorae (camphorated oil)  
Apply locally.

*Note:*—Lead and opium wash is extensively used for sprains but the combination has no effect and is entirely irrational. Opium is devoid of any peripheral effects especially when applied to the unbroken skin. Even morphine when directly applied to exposed nerves has no effect on their irritability. The sensibility of the skin is lowered by subcutaneous injections of morphine but the action involves the whole superficies of the body and is due to central action. Opium (or morphine) is of no service whatever as a local anaesthetic. Lead is one of the least corrosive but most astringent of the heavy metals but applied to the unbroken skin the salts of lead are devoid of action because the precipitation of proteids is prevented by intervention of epithelium.

**STOMACH DISORDERS.** See Dyspepsia.

**STOMATITIS.** See also Gingivitis, Mouth Infection, etc.

*Boracic Acid* is used as a mouth wash in aphtha and other forms of irritation.





- R. Acidi borici 4% solution  
Collutorium\*
- R. Glyceriti boroglycerini  
Collutorium or local application.
- R. Liquoris antiseptici (2% boracic acid)  
Collutorium.
- R. Sodii biborates 4%  
Collutorium.

*Potassium Chlorate* has been extensively used. It is toxic and valueless when given internally and so is irrational.

Locally as a mouth wash (2-4% solution or as lozenge) it may be used for a simple salt effect which of course is not specific and can possibly be imitated by the chlorides, nitrates or bromides, etc. In children a somewhat stronger solution in syrup or honey is often used to brush out the mouth; none should be swallowed on account of its toxic effects upon the kidneys and blood.

*Potassium Permanganate* solutions may be used with good effect in various stomatitides.

- R. Potassii permanganatis 1% solution  
As mouth wash or local application.

**SUNSTROKE.** Treatment consists in combating the hyperpyrexia which is accomplished chiefly by hydrotherapy; the cold bath and ice pack.

**SWEATING.** See Perspiration Excessive.

**SYPHILIS.** The following notes on the pharmacological treatment of syphilis are of course intended only as a guide to drug prescription and administration in line with the general purpose of this little book. The whole question of the treatment of syphilis is of course one of

\*Mouth wash

the most important in medicine and is one which at the present day along with the great progression which has been made in our knowledge of the general and special pathology and treatment of the disease is receiving all the attention which it fully deserves. The introduction of salvarsan represents a step forward, in progress and this together with the discovery of the spirochaete and the development of the Wasserman reaction has given an impetus to syphilography such as it had not received for several hundred years.

*Mercury* has for many years been the sheet anchor of the physician in the treatment of syphilis. It is supposed to act aetiotropically and destroy the cause of the disease (treponemacidal effect). It is usually given internally, or by inunction or hypodermic injection.

Internal administration of mercury; or administration by mouth:

R̄. Massae hydrargyri. . . . . .25 gm. (4 grs.)  
In pill, p. r. n.

R̄. Hydrargyri cum creta. . . . . .25 gm. (4 grs.)  
In powder or capsule.

This last can be conveniently given to children.

R̄. Hydrargyri chloridi corrosivi .003 gm. (1/20 gr.)  
In solution flavored traditionally with compound syrup of sarsaparilla.

R̄. Hydrargyri chloridi mitis, alterative dose .15 gm. (2 1/2 grs.)  
In powder or pill, with opium if necessary to prevent purgation—generally credited with likability to induce salivation.

R̄. Hydrargyri iodidi flavi . . . . . .01 gm. (1/6 gr.)  
In tablet or pill..

External application of mercury or treatment by inunction.







R̄. Unguenti hydrargyri (1/2 metallic Hg.) 2-4 g.  
(3<sub>ss</sub>-3<sub>i</sub>)

R̄. Unguenti hydrargyri diluti (half strength)

R̄. Oleati hydrargyri

The above ointments are rubbed in daily in different parts of the body to avoid irritation. The thighs, arms, forearms, legs, abdomen and back are used in rotation; continue the treatment 2-3 weeks.

Administration of mercury by hypodermic injection:

R̄. Hydrargyri chloridi mitis . . . . . 1 pt.  
Salt solution 10% . . . . . 20 pts.  
Dose .05-.1 g. (1-1 1/2 gr.) calomel once a week.

Gray oils. These have had a long vogue.

Example:

R̄. Purified mercury . . . . . 40  
Anhydrous lanoline . . . . . 12  
Sterilized white vaseline . . . . . 13  
Sterilized medicinal oil of vaseline 35  
Each 1/20 c. c. contains 2 1/2 grs. Hg. Shake  
and inject 2/20-3/20 c. c. every 8 days.

Biniodide of Mercury in watery solution.

R̄. Hydrargyri biniodidi . . . . . 5  
Sodii iodidi C. P. . . . . 5  
Aquæ destillatæ . . . . . 50  
Each c. c. = gm. .01 or 1/6 gr. of the drug.  
Inject daily for eight days.

Many pharmaceutical houses now put up sterile mercurial preparations in single doses which makes this kind of administration extremely convenient. A very good one is the ampoule of 1 gr. mercury salicylate. Inject once a week.







to make 300 c. c. Mix well, and the solution is ready for use, after being heated to the proper temperature (116° F.). Each 50 c. c. of this solution now represents 0.1 gm. of salvarsan, necessarily the dose may be regulated accordingly. Do not use common table salt in preparing the salt solution, but use chemically pure Na Cl, otherwise the finished product will be cloudy and not fit for intravenous injection.

#### Intramuscular injection of Salvarsan. Preparation of the Drug:

Caution: As in Intravenous Injection. Dissolve 0.6 gm. of Salvarsan in 5 c. c. of hot sterile water in a sterile mortar. Add 1 c. c. sterile normal Na OH solution. Mix thoroughly when a gelatinous mass is formed. This is redissolved in normal Na OH solution, drop by drop, not using over 4.5 c. c. of the normal Na OH solution in all. Then add sterile normal salt solution sufficient to make 10 c. c. Mix well, and the solution is ready for injection.

Method of Application of Neosalvarsan. Neosalvarsan may be administered by intravenous or intramuscular injection, but subcutaneous injection must under all circumstances be avoided owing to the danger of infiltrations. For intravenous injection 25 c. c. freshly distilled water are required for each 0.15 gramme Neosalvarsan.

For the intramuscular injection of Neosalvarsan an approximately 5% solution should be used, as 1 gramme Neosalvarsan dissolved in 22 c. c. water gives an isotonic solution. For each 0.15 gramme Neosalvarsan consequently about 3 c. c. freshly distilled water should be used for solution. In intramuscular injection it is advisable to diminish sensibility beforehand by injecting into the locality 5 c. c. of a 1/2% Novocaine solution; the canula is left in sites and after a few minutes the Neosalvarsan solution injected through the same.

#### Instructions for preparation of solutions:

The solutions of Neosalvarsan must be made with freshly distilled and sterilized cold water, that is to say water at room temperature. A 0.4% saline solution may

also be used for solution, provided that it is made from chemically pure sodium chloride and freshly distilled water.

If freshly distilled water is not available, well boiled, sterile tap water may also be used, if it is practically free from bacteria and does not contain too large a quantity of mineral salts.

Experience has shown that a combined treatment of Salvarsan with mercury or rather an alternate treatment with the two is to be recommended.

**TABES**—Locomotor Ataxia. This is always a parasymphilitic disease, *i. e.* a true chronic syphilitic infection of the meninges of the cord.

Treatment is antisymphilitic (*v. s.* Syphilis).

*Salvarsan* (606) has been successful in some cases. Swift and Ellis have devised a method of giving salvarsan intravenously and later injecting the blood serum intraspinally. The treatment is now on trial. Nervous syphilis requires specially energetic antisymphilitic treatment. The tendency is to incriminate a specially active neurotropism on the part of certain strains of spirochetes to account for the tendency of some individuals to nerve syphilis. Other tropisms may account for other determinations of this protean and ubiquitous disease.

*Acetanilid* is much used for the lightning pain and gastric crises of tabes.

R. Acetanilidi . . . . . 2 gm. (3 gra.)  
In tablet, powder or acacia mixture.

### **TACHYCARDIA, Paroxysmal.**

Paroxysmal tachycardia is a form of arrhythmia in which the normal mechanism of impulse formation is abruptly submerged in rapid contractions of the muscle in response to pathological impulse formation in a focus outside the sino auricular node.

*Aconite* slows and weakens the heart and circulation and occasionally arrests tachycardia.







- R̄. Tincturae aconiti. . . . . .3 mil. (5 minims)  
In flavored solution.
- R̄. Fluidextracti aconiti . . . . .03 mil. (1/2 minim)  
In flavored solution.
- R̄. Aconitinae. . . . . .00015 (1/400 gr.) ..  
In solution or hypodermically.

*Digitalis* is used to slow the rhythm; but if acceleration is the only symptom Aconite or Strychnine would theoretically be indicated.

- R̄. Infusi digitalis. . . . . .4 mils. (3i)  
Dilute with water.
- R̄. Fluidextracti digitalis. . . . . .05 mil. (1 m.)  
In flavored solution or water.
- R̄. Tincturae digitalis . . . . . .5 mil. (8 minims)  
In flavored solution or water.
- R̄. Digitalis foliae pulveris . . . . . .06 gm. (1 gr.)  
In pill, powder or capsule.

There are several proprietary preparations of digitalis which are much used because they are believed to be carefully standardized. Among these are Digalen and Digipuratum. The ninth revision U. S. P. gives methods for biological assay of digitalis preparations, consequently if the pharmacopoeial preparations are properly standardized they are equal to any of the best proprietary preparations.

- R̄. Strychninae sulphatis or nitratis or hydrochloridi. . . . . .001-.002(1/60-1/30 gr.)  
In tablet, pill, solution or hypodermically.

Occasionally a hypodermic of *Morphine* may be useful in suppressing the distress of an attack.

**TAPEWORM.** See Worms.

**TETANUS.** The prophylactic treatment of this disease is most important. Tetanus antitoxin is used for this purpose.

*Curare* has been successfully used occasionally. The preparation must have been previously physiologically standardized and carefully used.

Tetanus antitoxin is extensively used. It is credited with being surely effective as a prophylactic but of doubtful curative efficiency after the disease has once commenced.

*Opium* and the methane narcotics as *Chloral* are used to control spasms.

*Magnesium Sulphate* is used in tetanus injected into the subarachnoid space by lumbar puncture. Results still sub judice.

R̄. Magnesii sulphatis . . . . . 25%

Aquæ destillatæ.

Make solution—sterilize by boiling. Inject 4 c. c. at dose in 3rd or 4th lumbar space.

**THIRST.** A symptom of fever and of diabetic and other states.

*Demulcents* such as barley water are agreeable, as also the so-called "Imperial Draught."

Potassium bitartrate . . . . . 3i\*

Juice half a lemon

Boiled water . . . . . OI

Little sugar to taste

Ad libitum

**THRUSH.** Alkaline and antiseptic solutions are used particularly *Sodium Bicarbonate* or *Biborate* and *Thymol*.

R̄. Sodii bicarbonatis . . . . . 25%

\*Average dose 2 gm. (30 grs.)





- R̄. Sodii biboratis . . . . . 4%  
Apply locally.
- R̄. Thymolis . . . . . 1/5%  
Alcoholis . . . . . 10%  
Glycerini . . . . . 10%  
Aquæ  
Mouth wash or application.

**TINNITUS AURIUM.** The cause of the tinnitus must be ascertained if possible by competent otological examination.

*Suprarenal Gland* extract is used but in what forms relief is obtainable is unknown. The treatment is purely empirical.

- R̄. Suprarenali sicci . . . . . .25 gm. (4 grs.)  
In tablet or capsule.

**TONSILITIS.** See also Sore Throat.

Be sure that it is not diphtheritic.

*Demulcents* are used to cover the inflamed surface but they naturally have no curative value.

*Antiseptics* may be added to the demulcents. For this purpose Mercuric Biniodide is good.

- R̄. Hydrargyri iodidi rubri .0006\*  
Acaciae pulveris . . . . . q. s.  
Sacchari cum mentha piperita q. s.  
Lozenge. Dissolve slowly in mouth.

Quite effective to abort in the very early stages.

The *Salicylates* are extensively used possibly empirically. Their results are disputed. It is difficult to say in advance just in what class of cases it will be effective. The same may be said of *Quinine* and *Salol*.

- R̄. Sodii salicylatis . . . . . 1 gm. (15 grs.)  
In flavored solution.

\*Average dose U. S. P. IX .003 gm. (1/20 gr.)

R̄. *Acidi acetosalicylici* (aspirin; unofficial) .5 gm.  
(8 grs.)  
In capsule or acacia mixture.

R̄. *Quininae sulphatis* . . . . . .1 gm. (1/2 grs.)\*  
In capsule.

Combinations of *Salicylates* + *Quinine* + *Opium* + *Antipyretic-Analgesic* are often effective in tonsillitis especially when used in the early stages.

R̄. *Codeinae sulphatis* . . . . . gr. 1/4  
*Acetphenetidini* . . . . . gr. iss  
*Acidi acetosalicylici* (aspirin) . . . . . gr. iv  
*Cinchonidinæ salicylatis* . . . . . gr. i  
M. F. T. capsule. Doses of ingredients are less  
than the average dose on account of repetition.

*Phenyl Salicylate* (salol) + *Antipyretic-Analgesic* is a combination often given.

R̄. *Phenylis salicylatis* . . . . . gr. v  
*Acetphenetidini* . . . . . gr. v  
M. F. T. capsules or powder, p. r. n.

Or the following combination may be used *Aspirin* + *Salol* + *Antipyretic-Analgesic* + *Quinine*.

R̄. *Acidi diacetylsalicylici* (aspirin) . . . . . grs. viii  
*Phenylis salicylatis* (salol) . . . . . grs. v  
*Acetphenetidini* . . . . . grs. v  
*Quininae sulphatis* . . . . . grs. iss

M. F. T. capsule. By taking several capsules at a time the dose may be varied without increasing unduly the size of the capsule. Average doses are given but in practice the doses will be reduced if they are to be repeated.

\*Average antimalarial dose U. S. P. IX 1 gm. (15 grs.) daily.







Various other drugs are used empirically in tonsilitis. Two of these are *Aconite* and *Guaiac*. There are some diversities of opinion as to their effects. They lend themselves to administration in solution and hence may be readily given to children.

Example of combination:

R. Tincturae aconiti.....m. v  
 Tincturae guaiaci.....3i  
 Syrupi zingiberis, altheae or other, or,  
 Elixiris simplicis.....q. s.  
 To be taken in water, p. r. n.

Finally various gargles are used in tonsilitis, none of which possess any specific effects that are known. The following are examples:

1. Hydrogen peroxide 25%
2. Salt solution, normal
3. Liquor antisepticus N. F. 25%

All of these are used as gargles hot or cold, p. r. n.

**TOOTHACHE.** Oil of *Cloves*, *Creosote* and *Phenol* are used in dental caries to relieve pain. The action of these drugs is to paralyze sensory terminations of nerves after a short preliminary stimulation.

R. Creosoti  
 Olei caryophylli  
 Phenolis liquefacti a. a. 1 part  
 Apply on cotton to carious tooth.

**TOOTH INFECTION.** See also Mouth Infection.

The care of the teeth is rightly regarded as of extreme importance in general prophylaxis since it is well known that sub infections in the neighborhood of the teeth and gums is a frequent source of serious disease as Arthritis, Nephritis, etc. The Dentist with careful aseptic technic if he is given the proper opportunity can prevent some of these disasters.

**TORTICOLLIS.** Wryneck. It may be due to rheumatism (q. v.).

Massage and electricity are used. There is no special pharmacological treatment. Division of nerves is rarely practiced.

**TRACHOMA.** In active stage apply stick of Copper Sulphate. Use bichloride of mercury 1-5000 as eye wash, t. i. d.

Apply yellow oxide of mercury ointment nightly (gr. 1/2 or 1 to 3i of vaseline).

**TREMOR.** See Paralysis Agitans.

**TRICHINA.** Drugs do not effect the trichina embryos in the muscles. Purgatives are used in very early stages to clear the intestinal tract. (For administration v. Constipation.)

**TRYPANOSOMIASIS.** Sleeping sickness.

A tropical disease non-existent in this country.

*Atoxyl* (sodium arsanilate)\* .5 gm. injected on two successive days repeated at interval of 10 days. Optic atrophy has occurred as a toxic manifestation.

*Mercury* by hypodermic injection is also used. (For technique see Syphilis.)

**TUBERCULAR GLANDS.** Operation will often be necessary.

*Iodine* applied locally is sometimes used.

R̄. Tincturae iodi  
Apply locally.

R̄. Liquoris iodi compositi  
Apply locally.

Tubercular sinuses from infected glands are sometimes effectually treated with injections of Bismuth Paste (equal parts bismuth and vaseline).

\*Unofficial.





**TUBERCULOSIS PULMONARY.** Treatment principally hygienic and dietetic. There is no generally recognized pharmacologic treatment. *Tuberculin* is much used. Dose of Kochs old Tuberculin .0001 mgm. gradually increased. There is not much enthusiasm for the treatment at the present time.

*Mercury* is considerably used of late years and is rational. It is used hypodermically. For method of injection of mercury and formulae see under Syphilis (q. v.).

*Creosote* is much used. The results are still disputed. It certainly does not destroy the tubercle bacillus in the lung. It may act by disinfecting the intestine and preventing secondary alimentary tract infections. It should be remembered that creosote is chemically a phenol and is therefore not entirely harmless.

R̄. Creosoti. . . . . .25 mil. (4 minims)  
In solution.

In alcohol (whiskey) or in cod liver oil or as a mixture.

R̄. Creosoti. . . . . .m. iv  
Glycerini. . . . . .1/3  
Spiritus frumenti. . . . . .2/3  
With a little water t. i. d. Or in pill usually as follows:

R̄. Creosoti. . . . . .m. iv  
Pulveris saponis. . . . . .q. s.  
Althaeae pulveris. . . . . .q. s.  
Make into pill. Take p. r. n.

The symptomatic treatment of Tuberculosis includes attention to the following: Cough, Haemoptysis, Sweating and Fever (q. v.)

*Note*—The volatile oils were at one time given in the hope that portions excreted by the lung would suffice to kill the bacilli. The minute traces excreted in this way, however, are incapable of bactericidal effect. Injections of cantharidates were once used but have been abandoned.

**TYPHOID FEVER.** The prophylaxis of typhoid fever by vaccine is regarded by some as an accomplished fact since the experiences gained by Wright in the English Army and Russell in the American Army. Others are equally dubious of the effect of the treatment. All agree that the vaccine has no curative effects.

Antiseptic and Antipyretic drugs are sometimes used in typhoid, but the systematic treatment of typhoid with intestinal antiseptics has been abandoned.

The Dietetic treatment of typhoid is important, the tendency is to allow more food than formerly. For full information concerning the dietetic treatment of this disease consult modern works upon clinical medicine.

Hydrotherapy is today as formerly one of the basic methods of treating typhoid. The following symptoms may require drug treatment: Fever, Epistaxis, Constipation, Diarrhoea, Intestinal Hemorrhage, Perforation, Peritonitis, Collapse, Cystitis, Cholecystitis, Sepsis, etc. (q. v.).

There is no effective pharmacological treatment for Typhoid.

**ULCERS.** Treat the cause as varicose veins (surgery) syphilis, tuberculosis.

In ulcers, wounds and granulations *Copper Sulphate* and *Zinc Sulphate* are used for their astringent effect.

R̄. Cupri sulphatis 1% solution  
The solid crystals may be used to touch exuberant granulations.

R̄. Zinci sulphatis 1-4% solution.

*Scarlet Red* ointment is much used at present to stimulate keratinization of granulation tissue. It is a 4-8% ointment of toluyazonaphthol.

R̄. Unguentii rubri scarlatini . . . . . q. s.  
Apply locally after thorough cleansing.







**UNCINARIASIS.** Anemia may require treatment after the cause is removed.

*Thymol* has been found to be effective. It probably destroys the parasite.

R̄. Thymolis . . . . . 1. gm. (15 grs.) daily\*  
Make 3 capsules. Take one on empty stomach every three-quarters of an hour. Follow each dose with one ounce of magnesium sulphate in four ounces water. *Betanaphthol* is also effective.

R̄. Betanaphtholis . . . . . .25 (4 grs.) . . . .

R̄. Betanaphtholis benzoati (unofficial) .25 gm. (4 grs.)  
In powder or capsule. The benzoate is tasteless and non-irritant.

**UREMIA.** See also Nephritis.

Elimination is the fundamental requirement. Purgation and Diaphoresis are the chief methods of securing this.

Sweating by the hot air bath is extremely useful.

*Pilocarpine* if given early is sometimes effective. It should of course be administered with careful supervision.

R̄. Pilocarpinae hydrochloridi or nitratis by mouth  
.01 gm. (1/6 gr.); by hypodermic .005 gm. (1/12 gr.).  
As tablet hypodermically or in solution by mouth.

The use of vasodilators such as *Nitrites* (Nitroglycerin) may be indicated if there is marked hypertension.

R̄. Tabletæ nitroglycerini (unofficial) gr. 1/100–1/50  
By mouth or by hypodermic injection.

\*Antiseptic dose U. S. P. IX .125 gm. (2 gr.)

Morphine in small quantities may be required for convulsions or distress.

R̄. Morphinae sulphatis . . . . . .008 gm. (1/8 gr.)  
By hypodermic injection.

**URETHRITIS.** See also Gonorrhoea, Cystitis. The bacterial nature of the urethritis should of course be determined.

*Hexamethylenamine* is sometime used. It is unable to kill the gonococcus but may be more effective in non specific urethritis.

R̄. Hexamethylenaminae. . . . . .25 gm. (4 grs.)  
Taken in powder, capsule or tablet. Followed  
by water.

Astringents and Antiseptics used locally form the basis of treatment (for details see Gonorrhoea).

**URIC ACID DIATHESIS.** See also Gout, Arthritis.

Lithium salts are extensively used in this condition, but they are ineffective. The chief effects of lithium as shown by experimental work are exercised on the gastrointestinal tract when the salts are given hypodermically, intravenously or in large amounts by mouth. Lithium acts somewhat like the heavy metals and alkaline earths in this regard. Lithium is usually given as a carbonate so the alkaline effect must be considered. The amount of alkali, however, in ordinary doses of lithium carbonate is too small to have any considerable effect. It was formerly supposed that alkalies increased tissue oxidations but this has been refuted. Lithium was at one time supposed to form a soluble urate with uric acid in the tissues but apart from the fact that such a combination could be of no use in therapeutics the lithium salts do not affect the reaction of the blood except in toxic quantities. Lithium salts are entirely superfluous.

Piperazin, quinic acid and some other so-called specifics in uric acid diathesis are useless.





**URINE HYPERACIDITY OF.** See Hyperacidity of Urine.

**URTICARIA.** Saline purgatives are used (see under Constipation).

Local irritation and itching are treated variously. Tincture of iodine may be effective (see also Itching).

**UTERINE HEMORRHAGE.** See Hemorrhage Post Partum, and Hemorrhage Uterine.

**UTERINE INERTIA.** See also Labor.

Treatment involves questions of obstetrical pathology. The nature and cause of the inertia should be discovered.

*Ergot* stimulates contraction of the uterus. Preparations of ergot require standardization.

R. Fluidextracti ergotae . . . . .2 mils. (30 minims)  
In water.

R. Extracti ergotae . . . . . .25 gms. (4 grs.)  
In pill or capsule.

There are several standardized but unofficial preparations of ergot on the market which are adapted to use hypodermically and they may be used where hypodermic medication is desired. Among these may be mentioned ernutin, ergotole, etc.

Ergot should be given only in the absence of all impediment to the passage of the child (contracted pelvis, abnormal presentation, great rigidity), and if given before the head is delivered the dose should be small. A large dose may be given when the head is emerging.

*Pituitary* extract has recently been found to constitute the most effective drug to produce uterine contractions yet discovered. The extract is obtained from the posterior lobe of the hypophysis and possesses marked vasoconstrictor effects which are more lasting than those of adrenalin. Diuresis often occurs after its administration.

- R<sub>x</sub>. Liquoris hypophysis (puitrin) 1 mil. (15 minims)  
By hypodermic injection, repeated if necessary.

Of course when pituitary extract solutions are used in obstetrics for the purpose of stimulating uterine contractions, the absence of mechanical interference to delivery must be assured.

**UTERINE SUBINVOLUTION.** *Ergot* is sometimes effective in subinvolution but should not be long continued.

- R<sub>x</sub>. Extracti ergotae . . . . . .25 gm. (4 grs.)  
In pill.

- R<sub>x</sub>. Fluidextracti ergotae . . . . .2 mls. (30 minims)  
In flavored solution or in water alone.

**VAGINITIS.** See Gonorrhoea, Leucorrhoea.

**VALVULAR DISEASE.** See Heart Disease.

**VARICELLA.** Treatment entirely non specific and symptomatic. Pruritis may require attention. (See Itching.)

**VARICOCELE.** Treatment entirely surgical and orthopedic.

**VARICOSE VEINS.** Treatment entirely surgical and orthopedic.

**VERTIGO.** See also Meniere's Disease.

The causes of vertigo are numerous. Among these may be mentioned Arteriosclerosis, Brain Tumor, Epilepsy, Eye and Ear Disease, Anemia, Heart Disease, Gastrointestinal Disease, Fever, Nephritis, Uremia, etc. The true cause should be ascertained and treated.

**VOMITING.** Examine for sources of peripheral irritation as intestinal, renal or biliary colic, pregnancy, search for peritonitis, intestinal obstruction, hernia, renal disease, cerebral tumor.







In children, if chronic, rest the stomach and regulate the diet. Stop milk for a time and substitute raw meat juice, barley water and egg albumen. For the proper dietetic management of such cases consult proper pediatric literature.

Champagne is often effective in checking vomiting. The action is due to the *Carbon Dioxide*. Carbon dioxide may be obtained in many simple ways as from carbonated waters, Seidlitz powder, etc.

In sea-sickness, and vomiting from pregnancy the *Bromides* are used with good results.

R̄. Potassii bromidi . . . . . 1 gm. (15 grs.)  
In flavored solution or effervescent salt.

R̄. Sodii bromidi . . . . . 1 gm. (15 grs.)  
In flavored solution or with salis effervescens.

In vomiting which occurs in dyspeptic conditions *Lime Water* may be of value.

R̄. Liquoris calcis [.14% Ca (OH<sub>2</sub>)] 15 mls. (3iv)  
P. r. n.

*Cocaine* is often valuable in intractable vomiting.

R̄. Cocainae hydrochloridi . . . . . .015 gm. (1/4 gr.)  
In tablet or solution.

Vomiting caused by gastric irritation is sometimes relieved by *Chloral*.

R̄. Chlorali hydrati . . . . . .5 gm. (8 grs.)  
In dilute flavored solution or peppermint water.

In cyclic vomiting of children due to acidosis the *Alkalies* are indicated. Fats are removed from the diet and Purgatives given. (For details concerning Alkalies see under Hyperacidity.)

Various other drugs are used in treating the symptom

vomiting. Usually they act upon the vagus terminations in the gastric mucosa thus inhibiting reflexes. Among these drugs may be mentioned *Iodine Tincture* (m. i.); *Phenol* (m. i.); *Dilute Hydrocyanic Acid* (m. ii.).

**WARTS.** Often removed surgically. Silver nitrate sticks are used to destroy warty growths. Neutralize with Na Cl solution if necessary.

Trichloroacetic acid is used in watery solution 10% strength or more.

Salicylic acid collodion is also useful. (20%)

The caustic alkalies are used to a limited extent to remove warts. Potash pencils are employed—neutralize with dilute acids. A single exposure to X-ray will usually cure.

**WASTING DISEASES.** Cod liver oil is used in chronic wasting diseases such as tuberculosis, scrofula, rickets and some forms of syphilis, as a nutritive fat. Also in malnutrition in children.

R̄. Olei morrhuae . . . . . 10 mils. (℥iiss)  
In emulsion or plain.

R̄. Emulsi olei morrhuae (50%) . . 15 mils (℥iv)  
T. i. d. or p. r. n.

It is not necessary for the student to write in detail the formula for an extemporized emulsion. The pharmaceutical details are best left to the pharmacist. The emulsification is usually done with acacia. The following is one formula much used:

R̄. Olei morrhuae . . . . .	50
Acacia pulv . . . . .	12.5
Syrupi . . . . .	10
Olei gaultheriae . . . . .	.4
Aquae . . . . .	q. s. ad 100

**WHOOPIING COUGH.** Treatment is notoriously unsatisfactory. Drugs which have been recommended are legion.







The *Bromides* are said to give good results, and probably act by depressing the irritability of the central nervous system.

R̄. Potassii or sodii bromidi. . . . . 1 gm. (15 grs.)  
In solution and taken with considerable water;  
often flavored with syrup and some volatile  
oil preparation.

R̄. Potassii bromidi. . . . . grs. xv  
Syrupi  
Aquae menthae piperitae

*Antipyrine* oftens lessens the severity of the attacks, renders them less frequent and is said to shorten the disease. This last is extremely doubtful.

R̄. Antipyrini. . . . . grs. v  
Syrupi  
Aquae or (aq. menthae piperitae) q. s.  
Dose according to age and circumstances.  
About one grain of antipyrin may be given  
for every year of age, though if the dose is  
to be repeated it may be made less.

*Belladonna* preparations are widely used in whooping cough.

R̄. Extracti belladonnae foliorum .015 gm. (1/4 gr.)  
In pill.

R̄. Tincturae belladonnae foliorum .75 mil. (12  
minims)  
In flavored solution.

R̄. Fluidextracti belladonnae radicis .05 mil. (1  
minim)  
In flavored solution.

R̄. Atropinae sulphatis. . . . .0005 gm. (1/120 gr.)  
In solution.

*Opium* is effective in diminishing the irritability of the central nervous system. Paregoric is the favorite preparation on account of its safety.

R. Tincturae opii camphoratae . . . . . 4 mils. (3i)

Paregoric is 4% opium, one tablespoonful contains one grain of opium.

• **WORMS.** Hook Worm (*Anchylostomiasis*, *Uncinaria*)  
Treat the anemia per secundem artem.

*Thymol* is highly recommended and is regarded by most authorities as the best drug.

R. Thymolis . . . . . 1 gm. (grs. 15) daily\*

This is one dose. Put in capsules and take the quantity in morning while fasting. Repeat same amount in two hours. Follow in an hour or so with a saline purgative.

Thread or Pin Worm (*Oxyuris Vermicularis*). *Salt solution* injected into the rectum destroys Thread Worms. *Quassia enemata* 10% is also used.

R. Fluidextracti quassiae . . . . . q. s.

Sig. Put 3ii in half pint warm water and inject part or all at bed time for several nights. Retain for a while. A cleansing enema may be necessary prior to treatment.

Round Worm (*Ascaris Lumbricoides*). *Santonin* is used almost exclusively to remove round worms. Against tape-worms and other intestinal parasites it is less effective.

R. Santonini . . . . . .06 gm. (1 gr.)  
In powder, tablet, capsule, solution in castor oil.

R. Trochisci santonini N. F. (each .03 gm. (1/2 gr.)  
Dose: One for children, two for adults. Repeat night and morning if necessary for two or three days. Follow with purgative.

\*Antiseptic dose U. S. P. IX .125 gm. (2grs.)







- R. Santonini . . . . . gr. i  
 Pulveris sacchari lactis . . . . . gr. i or ii  
 Powder. Give one such every night and morning for a couple of days. Follow with purgative.

Santonin is often given combined with a Purgative.

- R. Santonini . . . . . gr. i  
 Hydrargyri chloridi mitis . . . . . gr. 1 1/2  
 Pulveris sacchari lactis . . . . . q. s.  
 Powder. Take one p. r. n.

**Tape Worm** (*Taenia Saginata* and *Solium*; *Bothriocephalus*).

Clear intestine of mucus, etc., by a saline, then give one of the anthelmintics. The chief drug used for tape worms is:

*Male Fern* (*Aspidium felix-mas*). Male fern is prescribed as the oleoresin. Dose 4–6 gms.  $\mathfrak{Z}$ i– $\mathfrak{Z}$ iss in capsules or emulsion.

- R. Oleoresinae aspidii . . . . . 2 gm. (30 gr.)  
 Caution: Single dose once a day.  
 Put in capsules, about six in number. Direct patient to take half the number and repeat the balance in an hour. Follow second dose with saline.

or

- R. Oleoresinae aspidii . . . . . 2 gm. (30 grs.)  
 Mucilaginis acaciae . . . . .  $\mathfrak{Z}$ i  
 Emulsion. Sig. Take half and repeat in an hour.

**WOUNDS.** Treatment surgical.

**YELLOW FEVER.** Isolation; mosquito protection; hydrotherapy, are all factors to be considered. There is no pharmacological treatment. Hemorrhage, uremia, fever and adynamia are symptoms which may require treatment.







## ALPHABETICAL LIST OF DRUGS

Alphabetical List of Drugs with Cross References to the Diseases or Symptoms under which they are mentioned in the first part of the book or Therapeutic Index. This list will enable the reader to refer to any particular drug in order to find its principal preparations, their doses and methods of administration.

### **ACETANILID**

Delirium, Diabetes Insipidus, Diabetes Mellitus, Dysmenorrhoea, Epilepsy, Fever, Headache, Influenza, Malaria, Neuralgia-Neuritis, Rheumatism  
Tabes.

### **ACETATES**

Cystitis.

### **ACID ACETIC**

Itching, Poisoning (Alkali.)

### **ACID BENZOIC**

See Benzoates.

### **ACID BORACIC**

Abrasions, Bed Sores, Bromidrosis, Burns and Scalds, Conjunctivitis, Leucorrhoea, Stomatitis.

### **ACID CITRIC**

Poisoning, alkali.

### **ACID HYDROCHLORIC**

Achylia Gastrica, Diarrhoea, Gastric Catarrh, Hypoacidity, Perspiration.

### **ACID HYDROCYANIC**

Itching

### **ACID LACTIC** (and Bacillus of)

Diabetes Mellitus, Diarrhoea, Intestinal Putrefaction.

**ACID PICRIC**

Burns and Scalds.

**ACID SALICYLIC**

Bromidrosis, Corns, Perspiration, Pityriasis

**ACID SULPHURIC**

Hemorrhage, Sweating.

**ACID TANNIC**

Adenoids, Bromidrosis, Cholera, Diarrhoea, Dysentery, Enterocolitis, Gingivitis, Hemorrhage, Hemorrhage Internal, Hemorrhoids, Leucorrhoea, Nipples Fissured, Perspiration, Poisoning Metallic.

**ACID TRICHLORACETIC**

Warts.

**ACONITE**

Angina Pectoris, Fever, Neuralgia-Neuritis, Pain, Tachycardia, Tonsilitis.

**ADDISON PILL** (Digitalis Squill Mercury)

Cirrhosis of Liver, Dropsy, Nephritis

**ADRENALIN** (See also Suprarenal Gland)

Hay Fever, Hemorrhage, Hemorrhage Gastric, Hemorrhage Nasal, Hemorrhage Post Partum, Shock.

**AGAR**

Constipation

**AGARICIN**

Night Sweats.

**ALBOLENE**

Constipation

**ALCOHOL**

Agalactia, Bed Sores, Boils, Chills, Debility, Fever, Heart Failure, Insomnia, Mouth Infection, Neuralgia-trifacial, Palpitation, Pityriasis, Shock.







**ALKALIES (Hydrates and Carbonates)**

Cystitis, Diabetes Mellitus, Dyspepsia, Dysuria, Flatulence, Gastric Ulcer, Hyperacidity, Itching, Jaundice, Poisoning Acid, Poisoning Chlorine, Prostatitis, Rheumatism Chronic, Vomiting.

**ALOE**

Amenorrhoea, Biliousness, Constipation,

**ALUM**

Conjunctivitis, Diarrhoea, Dysentery, Gonorrhoea, Hemorrhage, Hemorrhoids, Leucorrhoea, Skin Diseases, Sore Throat.

**AMMONIA**

Alcoholism, Alopecia, Bruises, Collapse, Debility, Heart Failure, Hiccough, Palpitation, Pityriasis, Poisoning Chlorine.

**AMMONIUM CHLORIDE**

Bronchitis, Cough.

**AMYLENE HYDRATE**

Insomnia

**AMYL NITRITE (See Nitrites)****ANESTHETICS**

Pain

**ANTIPYRINE**

Delirium, Diabetes Insipidus, Diabetes Mellitus, Dysmenorrhoea, Epilepsy, Fever, Headache, Influenza, Malaria, Neuralgia-neuritis.

**ANTITOXINE**

Diphtheria, Tetanus.

**APOMORPHINE**

Cough, Hysteria.

**ARSENIC**

Acne, Anemia, Anorexia, Arthritis Deformans, Asthma, Cancer, Chorea, Epilepsy, Hodgkin's Disease, Leucemia, Lupus, Lymphoma, Malaria, Neuralgia-neuritis, Osteomalacia, Psoriasis, Rheumatism Chronic, Rickets, Syphilis, Trypanosomiasis.

**ASPIDIUM**

Worms

**ASPIRIN**

See Salicylates.

**ATROPINE**

See Belladonna.

**BALSAM PERU**

Alopecia, Bed Sores, Scabies, Skin Diseases.

**BELLADONNA (Atropine)**

Alcoholism, Asthma, Bradycardia, Catarrh, Colic, Collapse, Cornea Inflammation, Cough, Cystitis, Dysuria, Hemorrhoids, Hyperidrosis, Incontinence of Urine, Iritis, Lead Colic, Morphine, Night Sweats, Pain, Perspiration, Poisoning Narcotic, Prostatitis, Salivation, Spasms, Whooping Cough.

**BENZOIN**

Abrasions, Croup, Nipples Fissured, Scabies.

**BENZOATES**

Calculus, Cough, Cystitis, Gonorrhoea.

**BENZOL**

Leucemia.

**BETANAPHTHOL**

Barbers Itch, Sarcina.

**BETANAPHTHOL BENZOATE**

Enterocolitis, Flatulence, Uncinariasis.





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**BILE** (Bile Salts)  
Biliousness.

**BISMUTH** (Subnitrate and Subcarbonate)  
Chafing, Diarrhoea, Enterocolitis, Gastric Ulcer,  
Gastric Catarrh, Sinus Tubercular.

**BITTERS** (Gentian, Calumba, Chirata, Quassia)  
Alcoholism, Anorexia, Dyspepsia Chronic, Hypo-  
acidity.

**BORAX**  
Blepharitis

**BRANDY**  
Diarrhoea

**BROMIDES**  
Abortion, Alcoholism, Chordee, Chorea, Convulsions,  
Croup, Delirium, Delirium Tremens, Epilepsy, Head-  
ache, Hiccough, Insomnia, Mania, Nervous Exhaust-  
ion, Neuralgia-neuritis, Palpitation, Vomiting,  
Whooping Cough.

**BROMOFORM**  
Insomnia

**CAFFEIN** (Coffee, Tea)  
Asphyxia, Collapse, Dropsy, Headache, Heart Fail-  
ure, Nephritis, Nervous Exhaustion, Poisoning Nar-  
cotic.

**CALCIUM SALTS**  
Hemorrhage Internal

**CALOMEL** (See Mercury).

**CALUMBA**  
(See Bitters).

**CALX SULPHURATA**

Hairy growths.

**CAMPHOR**

Bites and Stings, Bruises, Chills, Collapse, Flatulence, Heart Failure, Itching, Night Sweats, Shock, Skin Diseases, Sprains.

**CANNABIS INDICA**

Epilepsy

**CANTHARIS**

Alopecia

**CAPSICUM**

Alcoholism, Alopecia.

**CARMINATIVES**

Colic, Flatulence.

**CASCARA**

Biliousness, Constipation

**CASTOR OIL**

Cholera Morbus, Constipation, Dyspepsia Acute.

**CATECHU**

Diarrhoea, Hyperacidity.

**CHALK**

Diarrhoea, Acid poisoning.

**CHARCOAL**

Flatulence.

**CHLORAL**

Abortion, Alcoholism, Angina Pectoris, Chordee, Chorea, Colic, Convulsions, Croup, Delirium Tremens, Eclampsia, Emissions, Epilepsy, Insomnia, Mania, Vomiting.







**CHLORALAMID**

Insomnia.

**CHLORETONE**

Insomnia

**CHLOROFORM**

Asthma, Colic, Flatulence.

**CHRYSAROBIN**

Barbers Itch, Psoriasis.

**CLOVES**

Toothache

**COCAINE**

Fissure of Anus, Hemorrhoids, Pain, Vomiting.

**CODEINE**

See Opium.

**COD LIVER OIL**

Wasting Diseases.

**COLCHICUM**

Gout

**COLLODION**

Abrasions.

**COLOCYNTH**

Biliousness, Constipation.

**COMPOUND CATHARTIC PILL**

Constipation.

**COPAIBA**

Bronchitis, Cystitis, Gonorrhoea.

**COPPER SULPHATE**

Dysentery, Gonorrhoea, Ulcers.

**COUNTER IRRITANTS**

Cholera Morbus, Dyspepsia Acute.

**CREOSOTE**

Toothache, Tuberculosis.

**CROTON OIL**

Colic, Congestion of Brain, Constipation, Eclampsia, Lead Colic, Nephritis.

**CUBEBS**

Bronchitis, Cystitis, Gonorrhoea, Hoarseness, Sore Throat.

**CURARE**

Hydrophobia, Tetanus.

**DEMULCENTS**

Hyperacidity of Urine, Poisoning Irritant, Thirst.

**DIGITALIS**

Anuria, Auricular Fibrillation, Cirrhosis of Liver, Dropsy, Dyspnoea, Fever, Heart Failure, Tachycardia.

**DIURETIN**

See Theobromine.

**DUSTING POWDERS**

Chafing, Chancre, Chapping, Herpes.

**ELATERIUM**

Congestion of Brain, Dropsy, Eclampsia.

**EMETINE**

(See Ipecac.)

**EMOLLIENTS** (Lard, Vaseline, Olive oil, etc.)

Abrasions, Bruises, Chapping, Chilblains, Earache, Erysipelas, Hemorrhoids.





**ERGOT**

Afterpains, Hemorrhage Post Partum, Uterine Inertia, Uterine Subinvolution.

**ESERINE**

See Physostigmine.

**ETHER**

Colic, Eclampsia, Flatulence, Heart Failure, Pain, Palpitation.

**ETHYL CARBAMATE (Urethane)**

Insomnia

**ETHYL CHLORIDE**

Pain

**EUCALYPTOL**

Catarrh, Laryngitis.

**FORMALDEHYDE**

Breath Fetid, Bromidrosis, Chancre.

**GAMBIR**

Diarrhoea.

**GELSEMIUM**

Neuralgia-neuritis.

**GENTIAN**

Bitters.

**GLYCERIN**

Mouth Infection.

**HEDONAL**

Insomnia.

**HEROIN**

See Opium.

**HEXAMETHYLENAMINE**

Calculus, Catarrh, Diabetes Mellitus, Earache, Gonorrhoea, Jaundice, Measles, Meningitis, Phosphaturia, Poliomyelitis, Septicemia, Urethritis.

**HYDRASTIS**

Hemorrhage Uterine.

**HYDROGEN PEROXIDE**

Chloasma.

**HYOSCYAMUS** (Hyoscine)

Athetosis, Chordee, Chorea Senilis, Cough, Emissions, Gastric Ulcer, Insomnia, Morphinism, Paralysis Agitans.

**HYPOPHYSIS**

Acromegaly.

**ICHTHYOL**

Skin Diseases.

**IMPERIAL DRAUGHT**

Hyperacidity of Urine, Nephritis, Thirst.

**INFUSIONS**

Chill.

**IODIDES**

Actinomycosis, Aneurysm, Angina Pectoris, Arteriosclerosis, Arthritis Deformans, Asthma, Cirrhosis of Liver, Colic lead, Cough, Dyspnoea, Effusions, Nervous Exhaustion, Neuralgia-neuritis, Rheumatism Chronic, Syphilis.

**IODINE**

Abscess, Boils, Bromidrosis, Effusions, Gingivitis, Laryngitis Chronic, Pityriasis, Rheumatic Joints, Tubercular Glands.





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**IPECAC (Emetine)**

Catarrh, Chills, Cough, Dysentery, Enterocolitis, Fever, Pyorrhoea.

**IRON**

Amenorrhoea, Anemia, Anorexia, Arthritis Deformans, Gastric Catarrh, Hemorrhage, Neurasthenia.

**JALAP**

Biliousness, Cirrhosis of Liver, Constipation, Dropsy, Nephritis.

**KINO**

Diarrhoea, Hemorrhage.

**KRAMERIA**

Diarrhoea, Hemorrhage.

**LEAD ACETATE**

Diarrhoea, Itching.

**LIME SOLUTIONS**

Burns and Scalds, Chloasma, Diarrhoea, Diphtheria, Poisoning Oxalic, Vomiting.

**LIQUORICE**

Constipation, Cough.

**MAGNESIUM SULPHATE AND MAGNESIA**

Biliousness, Colic lead, Constipation, Diarrhoea, Dysentery, Flatulence, Hyperacidity, Lead Colic, Obesity, Poisoning Arsenical, Tetanus.

**MALE FERN**

Worms

**MENTHOL**

Bites and Stings, Breath Fetid, Catarrh, Itching, Laryngitis, Rheumatism Chronic.

**MERCURY**

Abrasions, Abscess, Acne, Alopecia, Arteriosclerosis, Barbers Itch, Biliousness, Blepharitis, Chloasma, Cirrhosis of Liver, Condylomata, Constipation, Dropsy, Impetigo, Iritis, Jaundice, Locomotor Ataxia, Pediculosis, Pleurisy, Psoriasis, Ringworm, Scabies, Skin Diseases, Syphilis, Tabes, Tonsilitis, Trypanosomiasis, Tuberculosis.

**MORPHINE**

See Opium.

**NEOSALVARSAN**

See Salvarsan.

**NEURONAL**

Insomnia.

**NITRITES**

Angina Pectoris, Asthma, Dyspnoea, Hemorrhage Pulmonary, Nephritis, Uremia.

**NITROGLYCERINE**

See Nitrites.

**NUX VOMICA**

See Strychnine.

**OPIUM** (Morphine, Codeine, Heroin).

Abortion, Angina Pectoris, Asthma, Bronchitis, Catarrh, Chills, Cholera, Chordee, Colic, Cough, Cystitis, Delirium Tremens, Diabetes Insipidus, Diabetes Mellitus, Diarrhoea, Dyspepsia Acute, Dyspnoea, Earache, Enterocolitis, Epilepsy, Fever, Gastric Ulcer, Headache, Heart Failure, Hemorrhage Intestinal, Hemorrhage Pulmonary, Insomnia, Lead Colic, Malaria, Mania, Pain, Peritonitis, Prostatitis, Tonsilitis, Uremia, Whooping Cough.

**ORTHOFORM**

Gastric Ulcer.





**OXYGEN**

Cyanosis.

**PARALDEHYDE**

Insomnia.

**PHENACETIN**

Catarrh Acute, Delirium, Diabetes Insipidus, Diabetes Mellitus, Dysmenorrhea, Earache, Epilepsy, Fever, Headache, Influenza, Malaria, Neuralgia-Neuritis, Rheumatism, Tonsilitis.

**PHENOL**

Bites and Stings, Breath Fetid, Burns and Scalds, Erysipelas, Gingivitis, Itching, Leucorrhoea, Pityriasis.

**PHENOLPHTHALEIN**

Biliousness, Constipation.

**PHOSPHORUS**

Caries, Impotence, Osteomalacia, Rickets.

**PHYSOSTIGMINE** (Eserine)

Amblyopia, Constipation, Gastric Dilatation, Glaucoma.

**PILOCARPINE**

Agalactia, Angina Pectoris, Dropsy, Eclampsia, Effusions, Uremia.

**PITUITARY EXTRACT**

Uterine Inertia.

**PODOPHYLLUM**

Biliousness, Constipation.

**POTASSIUM CHLORATE**

Gingivitis, Sorethroat, Stomatitis.

**POTASSIUM CITRATE**

Calculus, Hyperacidity of Urine.

**POTASSIUM HYDROXIDE, ACETATE AND CARBONATE**

Cystitis, Dysuria, Hyperacidity, Itching, Jaundice, Warts.

**POTASSIUM NITRATE**

Asthma.

**POTASSIUM PERMANGANATE**

Bites and Stings, Breath Fetid, Gonorrhoea, Leucorrhoea, Stomatitis.

**PURGATIVES**

Biliousness, Cholera Morbus, Colic, Congestion of Brain, Constipation, Diarrhoea, Dropsy, Dysentery, Dyspepsia, Eclampsia, Enterocolitis, Fever, Flatulence, Gastric Ulcer, Lead Colic, Nephritis, Obesity, Trichinosis, Uremia, Urticaria.

**PYROGALLOL**

Psoriasis.

**QUASSIA (See Bitters)**

Worms.

**QUININE**

Abscess, Afterpains, Alopecia, Angina Ludwig, Anthrax, Catarrh, Dysentery, Fever, Headache, Influenza, Kala Azar, Malaria, Neuralgia-neuritis, Splenomegaly, Tonsilitis.

**RESORCIN**

Alopecia, Barbers Itch, Erysipelas, Flatulence, Pityriasis.

**RHUBARB**

Biliousness, Constipation, Enterocolitis.

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**SACCHARIN**

Diabetes Mellitus

**SALICYLATES**

Abscess, Angina Ludwig, Calculus, Catarrh, Chorea, Earache, Effusions, Fever, Influenza, Iritis, Jaundice, Lumbago, Rheumatism, Sore Throat, Tonsilitis.

**SALINES**

See Purgatives

**SALOL** (See also Salicylates)

Flatulence, Rheumatism, Sarcina, Tonsilitis.

**SALT SOLUTION**

Hemorrhage.

**SALVARSAN**

Arteriosclerosis, Locomotor Ataxia, Relapsing Fever, Syphilis, Tabes.

**SANTAL**

Bronchitis, Cystitis, Gonorrhoea.

**SANTONIN**

Worms.

**SCARLET RED**

Ulcers.

**SEIDLITZ POWDER**

Constipation, Lead Colic, Obesity.

**SENEGA**

Cough.

**SENNA**

Constipation.

**SERUM ANTIDIPHThERIC**

Diphtheria.

**SERUM ANTITETANICUM**

Tetanus

**SERUM HORSE**

Hemophilia.

**SERUM MENINGITICUM**

Meningitis

**SILVER SALTS**

Blepharitis, Chancre, Conjunctivitis, Diphtheria, Dysentery, Fissure of Anus, Gastric Ulcer, Gingivitis, Gonorrhoea, Hemorrhage, Nipples fissured, Ophthalmia, Septicemia, Sore Throat.

**SODIUM BICARBONATE**

Acetonemia, Blepharitis, Burns and Scalds, Cystitis, Diabetes Mellitus, Dysuria, Flatulence, Gastric Ulcer, Hyperacidity, Itching.

**SODIUM HYDROXIDE**

Cystitis.

**SODIUM PHOSPHATE**

Constipation, Lead Colic.

**SODIUM SULPHATE**

Constipation, Dysentery, Enterocolitis,.

**SQUILL**

Auricular Fibrillation, Bronchitis, Cirrhosis of Liver, Cough, Dropsy.

**STRONTIUM SULPHIDE**

Hairy Growths.

**SULPHUR**

Constipation, Hemorrhoids, Gastric Ulcer, Obesity.

**STROPHANTHUS**

Auricular Fibrillation, Heart Failure.





**STRYCHNINE** (Nux Vomica)

Alcoholism, Amblyopia, Anorexia, Debility, Gangrene, Impotence, Night Sweats, Paralysis, Poisoning  
Narcotic, Tachycardia.

**SULPHONAL**

Insomnia.

**SULPHUR**

Barber's Itch, Fissure of Anus, Scabies, Skin Diseases

**SUPRARENAL** (see also Adrenalin)

Addison's Disease, Meniere's Disease, Tinnitus  
Aurium.

**TANNINS**

See Acid Tannic.

**TAR**

Skin Diseases.

**TERPENE HYDRATE**

Cough.

**TETRONAL**

Insomnia.

**THEOBROMINE**

Angina Pectoris, Dropsy, Nephritis.

**THEOCINE**

Nephritis.

**THYMOL**

Breath fetid, Gingivitis, Itching, Thrush, Uncinaria-  
sis, Worms.

**THYROID**

Acromegaly, Cretinism, Goitre, Myxedema, Obesity.

**TOLU**

Cough.

**TRIONAL**

Insomnia.

**TURPENTINE**

Alopecia, Hemorrhage Internal, Pain, Rheumatism Chronic.

**VACCINES**

Abscess, Acne, Cholera.

**VERATRINE**

Neuralgia-neuritis.

**VERONAL**

Insomnia.!

**VOLATILE OILS**

Bites and Stings, Colic, Pityriasis.

**YOHIMBIN**

Impotence.

**ZINC OXIDE**

Bed Sores, Burns and Scalds, Chafing, Herpes.

**ZINC SULPHATE**

Conjunctivitis, Dysentery, Gonorrhoea, Ulcers.









# LANE MEDICAL LIBRARY

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Barton, W.M.

Therapeutic index &  
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THE major portion of this invaluable book is taken up by the first part, which is a Therapeutic Index arranged alphabetically according to diseases. This arrangement is best because the most practical. The student or practitioner can use the book as a pocket manual of reference as well as a systematic treatise on drugs and their uses. Finally an alphabetical list of the drugs themselves has been appended as a second part in which under each drug is given a list of the diseases or symptoms under which it is to be found in the Therapeutic Index. This will enable the student to use the book as a materia medica, since, whenever so inclined, he may refer to any particular drug such as opium, mercury, etc., and find the principal preparations, their doses and methods of administration.

Finally, the book has been made to conform to the ninth decennial revision of the United States Pharmacopoeia, which became official September 1, 1916. The method of prescribing average doses for all drugs and preparations adopted by the last two revisions of the Pharmacopoeia, is a distinct improvement upon the old method of giving minimum and maximum doses. Only one dose has to be committed to memory and this the average dose. The age of the patient, and the circumstances of the case will call for modifications of this dose, which must be left to the judgment of the prescriber.

The book is interleaved to give space for additional notes.



